The American Artisan
And Hardware Record

Vol. 47—No. 3. CHICAGO, JANUARY 16, 1904. $2.00 per Year.

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COLUMBUS BOLT WORKS
COLUMBUS, OHIO
Write for Our General Catalog "C"

PURE ASPHALT ROOFING
Never Dries Out or Cracks Our Tarred Ready Roofing, Slaters' Felt, Building Paper, Roofing Cements, Paints, Etc
WRITE US FOR PRICES
L. PERKINS & CO. 235 Lake St. CHICAGO

AMERICAN SEAL PAINT MANUFACTURED BY THE WM. CONNORS PAINT AND COLOR WORKS, TROY, N.Y. ANY DESIRED SHADE OR COLOR

Never Will Leak . . .

American Seal Elastic Oil Cement will not get hard—always stays elastic.

Stops leaks in any roof—old or new, and will wear for years. Fix up the roof now and stop the leakage—in money and roof.

Use it on new work for jointing and 'round your skylights—follow it with a coat of American Seal Roof Paint—the best made—and the top of your house is safe for years. *Prices for the asking.*

THE WM. CONNORS PAINT MFG. CO.
TROY, NEW YORK
WESTERN AGENTS Dept. A. { J. L. Perkins & Co., 235 Lake St., Chicago. Stockhoff Supply Co., 107 N. Main St., St. Louis.

THIS SPACE FOR SALE
Inquire of Owner
Daniel Stern, 69 Dearborn St.
CHICAGO.

TINNERS FIND EMPLOYMENT
By advertising and using THE POWERS AUTOMATIC CHIMNEY TOPS
They make chimneys draw, give tinners employment making stocks, and give the dealers profit.
Sold by Hardware Jobbers and Dealers.
Made only by POWERS BROS. STREATOR, ILL.
This cut free to dealers.

NOTICE.

We have exceptional facilities for handling American products: Hardware, Sanitary, Heating and Ventilating Goods. Branches in England and continent. References furnished.

ADDRESS
EXHIBIT & TRADING CO.
Main Office, 72 Henry St.
LIVERPOOL, - ENGLAND

Atlas Bolt & Screw Co.
CLEVELAND, O.
Manufacturers of

Stove Bolts
Stove Rods
Stove Rivets
Mica Bolts
Fancy Nuts
Register Pins
Hinge Pins
and kindred articles for the
STOVE and RANGE
Manufacturing Trade

Crying—to—do—business—without—advertising—is—like—winking—at—a—girl—in—the—dark;—you—know—what—you—are doing—but—nobody—else—does.

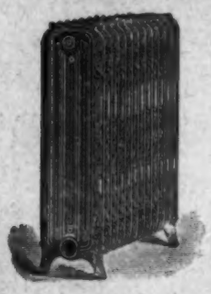
Black Diamond Files and Rasps
PERFECT—ALWAYS
TWELVE MEDALS AWARDED AT INTERNATIONAL EXPOSITIONS

G. & H. BARNETT CO.
Black Diamond File Works, PHILADELPHIA, PA.

NICHOLSON FILE CO.
GENERAL OFFICES: PROVIDENCE, R. I., U.S.A.
Manufacturers of

FILES AND RASPS
NICHOLSON KEARNEY & FOOT ARCADE AMERICAN GREAT WESTERN McCLELLAN EAGLE J. B. SMITH "X. F." GOLD MEDAL

GENEVA TOOL CO. Hand Agricultural Tools Geneva, O.



Regardless of price the value of IDEAL Boilers and AMERICAN Radiators is absolutely superior—a full measure. Twelve Warehouses—Quick shipments.

AMERICAN RADIATOR COMPANY
LAKE AND DEARBORN STREETS, CHICAGO

SPERRY'S STEAM KETTLES

Made from very thick metal, without Stay Bolts, joint packed in such a manner as to never need repacking. A little higher priced than some, but they are safe and tight : : : : : :

D. R. SPERRY & CO. Hollow-Ware Founders, BATAVIA, ILL.

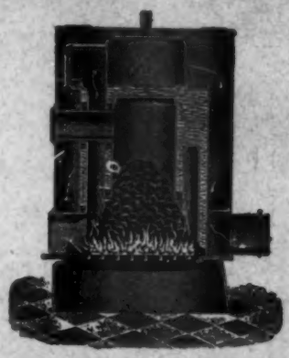
To The Hardware Trade:

Our SPECIAL HIGH QUALITY SLIM TAPER FILES with extra sharp cutting edges that have been extensively sold throughout the West and Northwest by Woodrough & Hanchett Co. of Chicago (now out of business) is still one of our LEADERS, and all orders on this class of goods will be filled direct or through your jobber.

MAYER & COMPANY
Manufacturers of
GOLD MEDAL FILES AND RASPS
NOT IN THE TRUST. BEST ON EARTH.
Philadelphia Pennsylvania

O-RIB-O WARE

BRISCOE MFG. Co. DETROIT.



"DEFENDER" STEEL BOILER

For Steam and Hot Water Heating Surface Burner. For Soft and Hard Coal. Portable and Brickset.
KEWANEE BOILER COMPANY, Kewanee, Ill.
167 EAST LAKE STREET, CHICAGO
St. Louis Office: 518 Bank of Commerce Building

BURTON'S FUEL ECONOMIZER

Attached to a stove pipe saves more fuel and radiates more heat than any other stove pipe attachment

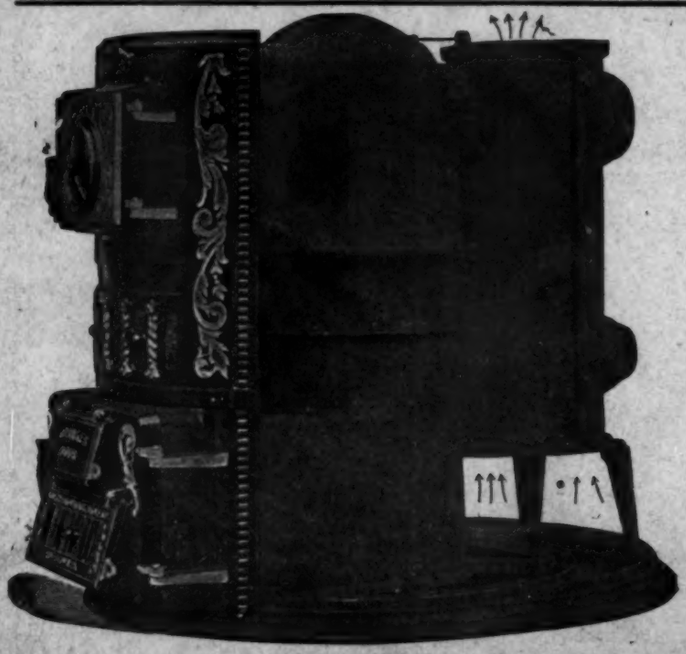
AN EASY SELLER.

Assertions Backed by Guarantee.

The W. J. BURTON CO., Detroit, Mich.

Regular forms of Specifications will be mailed on request, together with the finest Catalog we ever issued.

CORTRIGHT METAL ROOFING CO.
Philadelphia and Chicago.



The Crown "Low Down" Warm Air Furnace.

HUSTLERS

Are Always in Demand.

There are drones and workers in the furnace world as well as elsewhere.

THE CROWN FURNACE

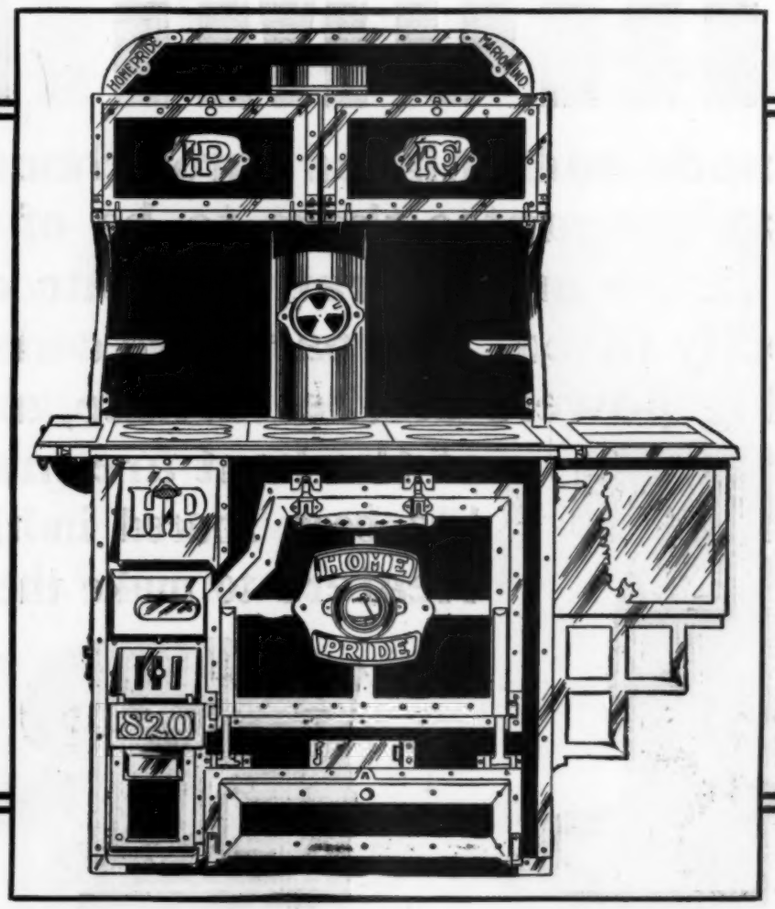
"Low Down" Type, Made in 4 Sizes

is a "hustler." It is made extra heavy throughout, and will stand severe usage.
It has an extremely large amount of radiation for the size of the firepot used.
It can be very easily cleaned.

ASK FOR OUR 1903 FURNACE BOOK

March-Brownback Stove Co.
POTTSTOWN, PA.

THE GREATER HOME PRIDE



Greater in material, finish and construction.

Has all the good points of other first-class malleables, and many that others have not attempted.

Send for catalogue for 1904.

In 23, 20 and 18-inch ovens.

Blue or black enameled steel.

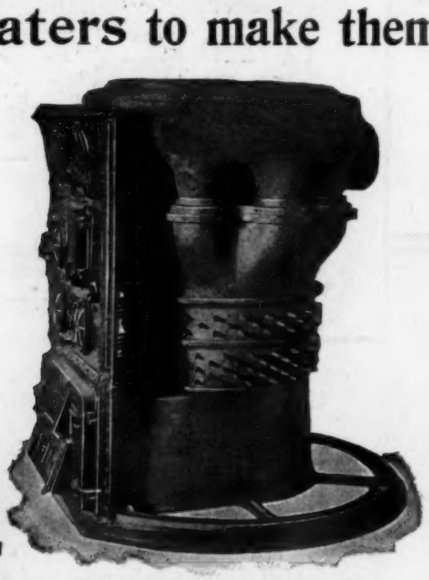
HOME PRIDE RANGE COMPANY

MARION, INDIANA

TRIUMPH F

Are made and finished throughout, in our own
and we guarantee them to be of the best mate
ship, finish and operation. Our castings are of
perfectly fitted. All parts are constructed so as t
heating powers of the furnace, and all parts ex
of the heat are made extra strong
has been spared in the production of th
Heaters to make them the superior of

The Triumph all Cast Furnaces. Five Sizes. Hard or Soft Coal. Portable or Brick Set.



TRIUMPH KING FURNACE. Five Sizes. Hard or Soft Coal. Portable or Brick Set.

TRIUMPH SPECIAL FURNACE. Five Hard Coal or Coke. Portable or Brick

TRIUMPH HOT WATER HEATER.

Why not write for Catalogue? Why

THE CRAIG-REYNOLD

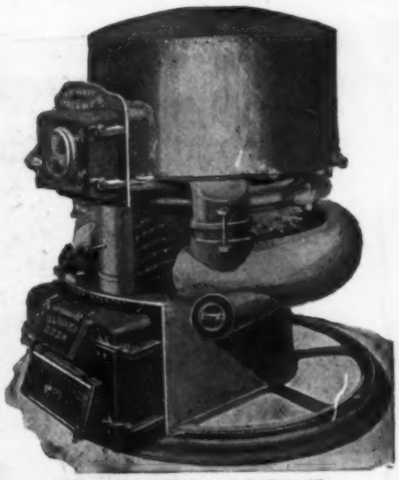
DAYTON, OH

JOHN KONTNY, We

153-159 South Jefferson Street

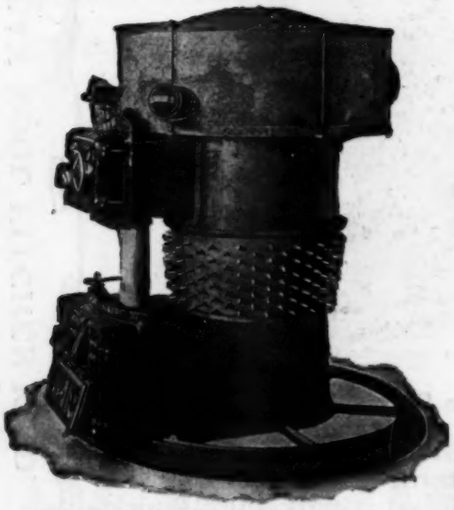
FURNACES

own foundry and works, by skilled mechanics,
material, perfect in workman=
are of very smooth surface and
o as to best withstand the great
rts exposed to the direct action
strong and heavy. No expense
on of the Triumph Furnaces and
rior of any apparatus upon the market.



TRIUMPH AIR BLAST FURNACE.
Five Sizes. Hard or Soft Coal. Portable or Brick Set.

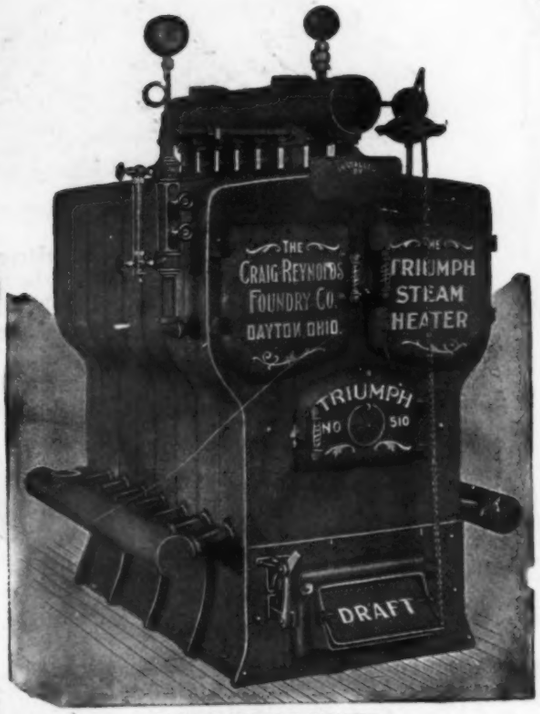
L FURNACE. Five Sizes.
. Portable or Brick Set.



THE TRIUMPH STEEL FURNACE. Five Sizes.
Hard Coal. Portable or Brick Set.

ue? Why not secure the Agency?

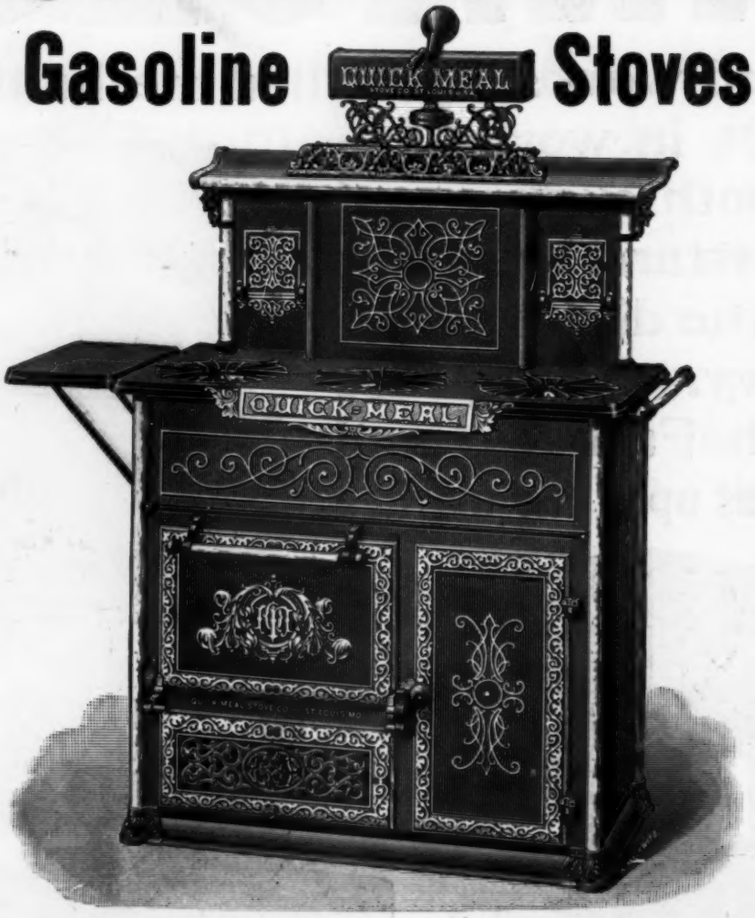
NOLDS FOUNDRY CO.
TON, OHIO.
Y, Western Agent
eet - - - CHICAGO



TRIUMPH STEAM HEATER.

QUICK MEAL

Gasoline Stoves



THE KLEAN KOOL KITCHEN KIND.

THE KLEAN KOOL KITCHEN KIND.

"Quick Meal" Cabinet Gasoline Stoves have been more successful than any other style of Evaporating Gasoline Stoves. They are the MONEY MAKERS for the DEALER. There is less trouble, and it costs no more to sell them than the cheap ordinary Junior Stoves. That is why the "Quick Meal" Dealer is always the leading dealer in his town. He sells the best.

RINGEN STOVE CO. DIV. OF AMERICAN STOVE CO.

ST. LOUIS.

San Francisco, Cal.
45 and 47 Bluxome St.

Portland, Ore.
4th and Davis Sts.

"RELIABLE"

Is not only the trade name but it is the word which most fully describes our

VAPOR STOVES

Our new 1904 patterns are the product of the most skilful workmen using the best material. We make in such quantities that we can offer highest quality at bottom prices.

"RELIABLE" stoves are constructed according to the safety requirements of the National Board of Fire Underwriters and are on their list of "Permitted Stoves." :: ::

SCHNEIDER AND TRENKAMP

Division American Stove Co.

CLEVELAND, O.

THE EDWARDS NESTED STOVE PIPE

MADE IN ALL GRADES
OF STEEL

1 PASS COLD ROLLED (D)
WOOD'S REFINED (C)
POLISHED (B)
PLANISHED (A)

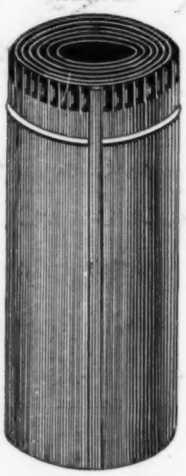
It Fits

Nothing Complicated

In Fact It's Simple Easy and Satisfactory

No Explaining to the User

NESTED



MADE IN ALL SIZES

It Speaks for Itself

25 Joints

Wrapped in Paper

Packed in Wooden Crate

Saves Freight, Temper, Time and Money

Guaranteed to Fit

Ask your nearest jobber or write to

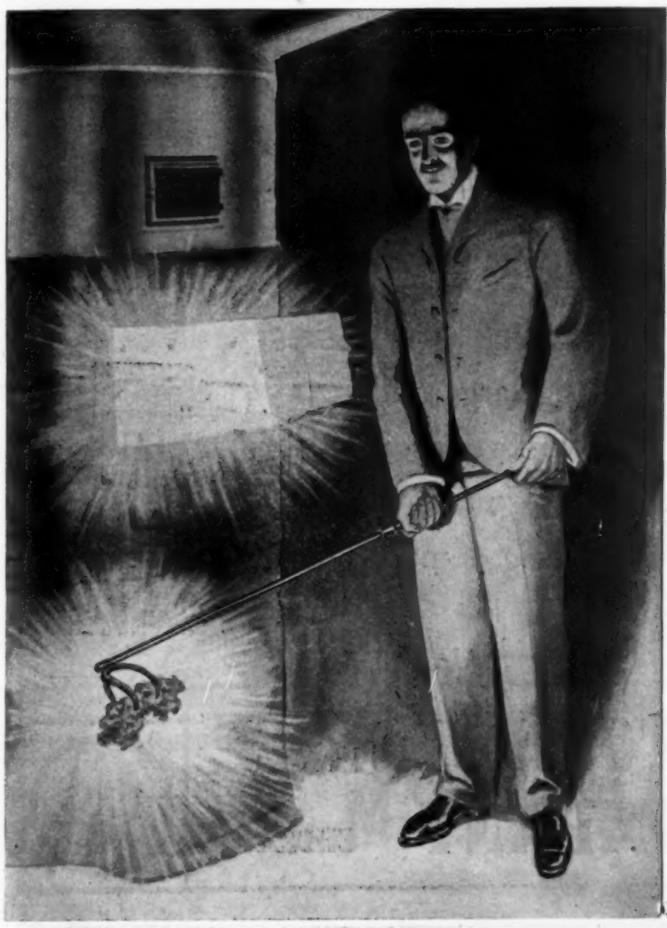
The Edwards Manufacturing Co.

100 to 110 Sycamore St., :: Cincinnati, O.

FACTORIES:
Cincinnati, O. Covington, Ky.

Also Manufacturers of

Conductor Pipe, Eave Trough, Corrugated Iron, Steel Roofing.



FURNACE FIRES FLOURISH

Only when the grate is free from clinkers, consequently dealers will find a good demand for an instantaneous clinker remover. Every furnace owner who has ever removed a clinker by the tedious and cuss-provoking shovel and poker combination, can easily be induced to buy the

U. S. CLINKER HOOK

Which saves coal, time, heat, temper, clothes and grate. Advertisements in leading magazines have created a big demand; why shouldn't you reap the benefit.

For discounts, etc., write,

U.S. Wire Mat Co.

DECATUR, ILLINOIS.

"THE LINES THAT PLEASE THEIR PATRONS"

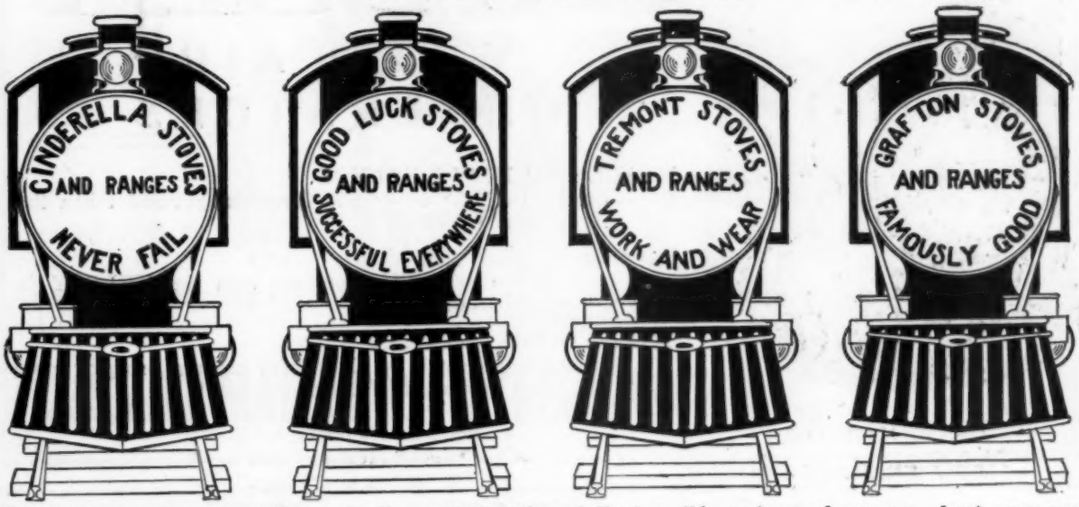
Cinderella Grafton

THE PITTSBURGH LINES

Good Luck Tremont

PLEASE ALL OF THE PEOPLE ALL OF THE TIME

The rich find them the most satisfactory. The thrifty find them the most economical. The designs please the eye. The prices fit the pocket book.



Our Salesmen are now on the road. You will find them full of confidence born of success. Last year we developed a number of new pieces of goods that stand out as phenominal sellers, even in "Our Lines," where success is a common condition.

OUR MAN IS THE MAN YOU WANT TO SEE.

W. D. SAGER, Chicago, Illinois, "Cinderella Line."

PITTSBURGH STOVE & RANGE CO., Pittsburgh, Pa.

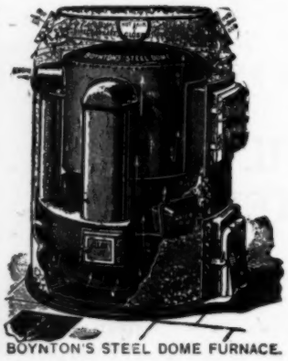
TUTTLE-ALLEN STOVE CO., Kansas City, Mo. "Good Luck Line."

1904

The Old Reliable

MANUFACTURERS OF
UP-TO-DATE HEATERS

Steam, Hot Water and Hot Air



BOYNTON'S STEEL DOME FURNACE.

We are making large additions to our works and output capacity, to meet the rapidly increasing demands of our trade.

The BOYNTON FURNACE COMPANY

NEW YORK CHICAGO

1904

For 1904

WHY NOT SECURE
THE AGENCY FOR

KELSEY

WARM AIR
GENERATORS

NEARLY 200 NEW DEALERS
during the last two years have bought and taken the Agency for "Kelseys."

NO OTHER HEATER
is like or can possibly compete with the KELSEY in securing the best results.

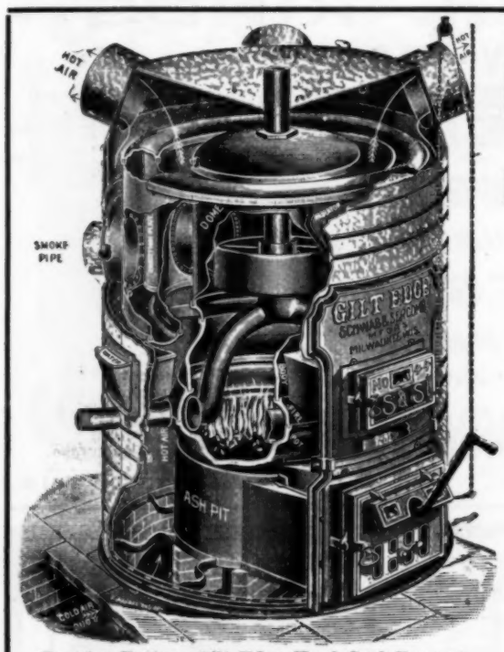
THESE GOOD RESULTS
from the thousands of Kelseys in use are bringing more and more business to "Kelsey dealers."

24,000 in use.
700 Dealers selling.

Send for Booklets—
"Kelsey Heating" and
"What the Users Say."

KELSEY HEATING CO., Makers, SYRACUSE, N. Y.

COOK & VAN EVERA CO., Chicago, Ill. NEW YORK OFFICE, 156 Fifth Ave.
JAMES SMART MFG. CO., Ltd., Sole Makers for Canada, Brockville, Ont.



Regular Pattern Gilt Edge Hard Coal Furnace

GILT EDGE
HARD COAL FURNACE

GILT EDGE in construction.
GILT EDGE in up-to-dateness.
GILT EDGE in durability.
GILT EDGE in economizing fuel.
GILT EDGE in ease of operation.
GILT EDGE as a money maker for the dealer.

Number of Sizes 8 — Heating Capacity 10,000 to 70,000 cu. ft. — Fire Pot 20 in. diam. top to 36 in. diam. bot.

SEND FOR CATALOGUE

R. J. SCHWAB & SONS CO.
MILWAUKEE, WIS.

CHICAGO MALLEABLE STEEL RANGE

Pouch Feed.

Clinker Door.

Main Front One Malleable Piece.

Will Not Break or Fire Crack.

WRITE FOR SPECIAL BOTTOM PRICES.

Flush Right Hand Reservoir Made of Copper.

Top Covered with Copper.

Lid Faced with Copper.

Will Not Rust Water.

Heats 18 Gallons.

Write for Special Bottom Prices.

CHICAGO MALLEABLE STEEL RANGE CO., 194-202 Mather St., CHICAGO.

THAT PAPER IS THE CHEAPEST WHICH BRINGS THE BEST RESULTS IN PROPORTION TO ITS RATE, NO MATTER WHAT THAT RATE MAY BE.

ALL SIZES--ALL KINDS--

ONE QUALITY--BEST.

The MUELLER Line of Furnaces and Boilers is the MOST COMPLETE, also THE BEST.

PROMPT SHIPMENT.

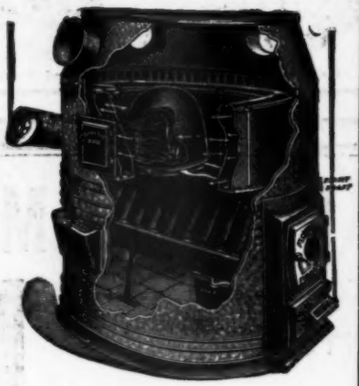
WRITE FOR CATALOGUE AND PRICES.

L. J. MUELLER FURNACE CO.

191 REED STREET ESTABLISHED 1857. MILWAUKEE, WIS.

FLORAL CITY FURNACES

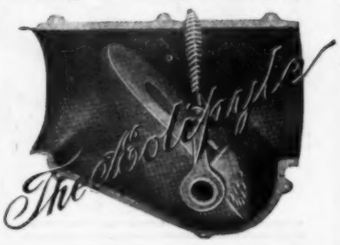
Are strictly up-to-date, old patterns have been relegated to the scrap heap, old methods discarded, but they are in no sense experiments. Every furnace is time tried and has been thoroughly tested in a climate where the temperature often falls to 40° and 50° below zero. Write for catalogue.



MONROE FOUNDRY & FURNACE CO.

MONROE, MICH.

The Acolipyle made by the AEOLIPYLE CO., 237 Water St, New York—saves coal—increases heat—keeps temperature even—prevents escape of coal gas reduces labor, avoids sifting ashes. Can be used with furnace—hot water heater—on pressure boiler—stove—range. **That's All**



Money

in retailing Steel Ranges is made not by handling something "just as good" as the "other fellow" has, but in putting in a line of goods that are a good deal better.

Champions

ALSO MARQUARTS

possess every feature of genuine merit known to modern steel range construction and have one feature found in no other range on the market in the shape of an additional flue, which is below the main heating flue, and conducts the air through the ash pit to the combustion chamber.

CHAMPION STEEL RANGE CO. CLEVELAND OHIO.

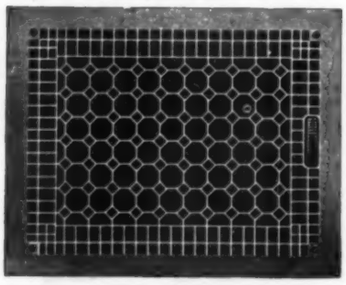
CAR LOAD BUYERS

Wall Register.

OF

REGISTERS

Will find it to their interest to get our prices before contracting for, or purchasing their 1904 supply



Floor Register.

L. J. MUELLER FURNACE CO.

191 REED STREET ESTABLISHED 1857 MILWAUKEE, WIS.

GEM STOVES AND RANGES CHICAGO, ILLS.

WE are manufacturing a new line of Cheap OAKS and RANGES, especially for Jobbing trade.

We have one of the finest cheap Oaks on the market; also Range.

Write for prices and cuts.

TOLEDO STOVE & RANGE CO.

ST. LOUIS, MO.	TOLEDO, O.	CHICAGO, ILL.
Branch Office: Manufacturers' Bldg., 14th and Locust.	Main Office and Factory: Smead and Fitchland.	Branch Office: 28 East Lake Street, Cor. Wabash.

Emperor Furnaces

FOR WOOD.

Simple, Safe, Durable. Economical in Fuel.

The Best and Cheapest Line of Wood Furnaces . . .
Furnished for either Brick or Galvanized Iron Casing.

SEND FOR CATALOGUE.

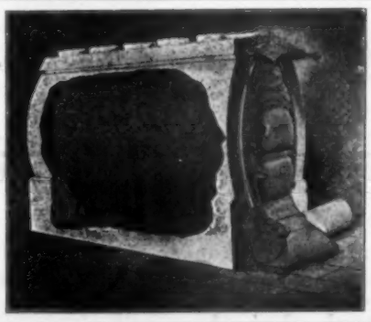
Bergstrom Bros Co.

NEENAH, WIS.

Kundert & Fitzgerald,

Madison, S D., write:

"We secured a good tinner through your paper."



THE FARQUHAR ONE PIECE WELDED STEEL SELF-REGULATING FURNACE

Paintersville, O., Jan. 31, 1903.

FARQUHAR FURNACE CO., Wilmington, O.

Dear Sirs: Having had your furnace in use four years, allow me to say I am better satisfied with it at the end of each winter, and I have good reasons for it. Its self-regulating powers are so perfect that there is no waste of heat, making the cost of operation a very small item. I heat my entire house of ten rooms with less fuel than it took to run one stove. It will burn coal, rough wood and even sawdust very satisfactory. There is no bowl to crack or burn out and cause an extra expense in repairs. To my knowledge your furnace has no equal. Hoping you will make many houses comfortable during the winter season by placing your furnace therein, I am truly yours.

H. C. FAULKNER.

FARQUHAR FURNACE CO., Wilmington, O.

THE SUN STOVE COMPANY

DETROIT MICHIGAN

MANUFACTURERS OF

SUN STOVES

Gasoline, Oil and Gas Stoves **Ovens and Oil Heaters**
Air-Tight Heaters for Wood **Gasoline Torches and Lamps**
Hot Blast Smoke Consuming Coal Heaters

Sun Front Feed Stoves and Peerless Stoves—smokeless and absolutely odorless. Quick lighting, safe and reliable, with warming closet which heats to a temperature of 125 degrees with no extra consumption of fuel. Admitted by our competitors to be the best burner in the market. Our model Sun Junior Gasoline Stoves, complete Brass Burners. The very best generating burner in the market. In all sizes from 7 inches to 626 with step. Ovens of very heavy, superior grade returnable flues. The only good working oven sold. A trial order will convince you.

DETROIT VAPOR STOVES

HAVE COME TO STAY.

25 Styles from a one burner Hot plate to the finest **Steel Cabinet Range.**

Our Stoves are made handsome, strong, simple, absolutely safe, durable, pure fire, self Cleaning. Can be used summer and winter. Must be seen to be appreciated.

Send for 1904 calalog and secure agency.

THE DETROIT VAPOR STOVE CO., DETROIT, MICH.

HERO FURNACES

Are best for cold climate

SMITH'S HOT WATER ATTACHMENTS

Can be used on any furnace

CHAS. SMITH CO.
CHICAGO, ILL.

40 SQUARE FEET OF HOT STEEL!

IN THE RADIATOR ALONE OF THE Canton Perfect Blast Furnace to make Warm Air.
"JUNE COMFORT IN JANUARY"

The CANTON PERFECT BLAST.
THE BONNOT COMPANY, Canton, O.

M. V. KEHOE, Monticello, Iowa, writes:

"Please discontinue advertisement for Tinner. We have more replies than we can answer. We obtained a good man through THE AMERICAN ARTISAN."

FORBES FURNACE.

This furnace has marked improvements over any warm air heating furnace now in use. It will burn hard or soft coal. Why not write for catalogue?

TUBULAR HEATING AND VENTILATING CO.
PHILADELPHIA, PA.

6,000

Front Rank Furnaces are now in operation in St. Louis **alone.**

Is not this fact alone a wonderful proof of the satisfactory operation of this furnace? Won't it pay you to handle such a furnace as this?

Write us for catalogue and prices.

FRONT RANK STEEL FURNACE CO.
2301 to 2309 Lucas Avenue, ST. LOUIS, MO.

WEIR ALL STEEL GAS AND SOOT CONSUMING FURNACE.

THE HEAVIEST STEEL FURNACE MADE.

Absolutely Gas and Dust Tight. A Great Heat-Producer, but a Fuel Saver.

MANUFACTURED BY

THE MEYER FURNACE CO.
1300-1304 S. Washington St.,
Send for Catalogue. PEORIA, ILLS.

"The HANDY FURNACE PIPE"

Made with a View of Being Safe.

The saving of labor in putting it up really makes it the cheapest hot air pipe on the market.

MANUFACTURED BY

F. MEYER & BRO. CO.
Send for Catalogue. PEORIA, ILLS.

WILSON & LESLIE, SOUTH BEND, IND.,

WRITE:

"We are surprised at the great circulation of THE AMERICAN ARTISAN as we have received letters from a great many different states."

STOWELL'S

Solid Comfort with a Stowell Side Wall Register.

Side Wall and Floor
REGISTERS
ALL SIZES AND FINISHES

We doubled our sales in Registers in 1903. Why? Because Stowell goods give satisfaction.

STOWELL MFG. & FOUNDRY CO.

South Milwaukee, Wis.

The Champion Hot Water Combination Heaters

They Fit Any Furnace

Base section when used without ring sections.

Ring section

These Heaters are made in five sizes diameter, and from 100 to 7 0 square feet radiation capacity.
Will heat those cold rooms or an addition to the building. Will increase the capacity of any furnace. Are cheaper than coils and will do more work.
Write for new circular. Manufactured by

FRANK D. STOLZ
156 Webster Ave., CHICAGO, ILL.

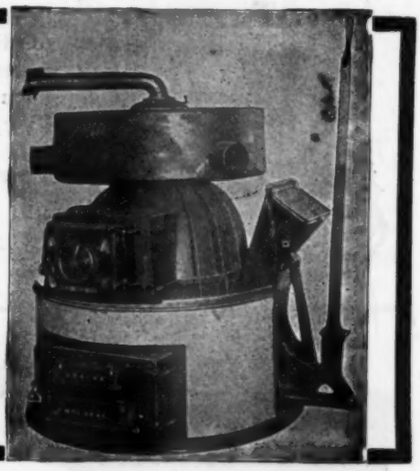
J. K. SCHICK, Fairbury, Ill., writes:
"Your paper has furnished me with more than ten times the value of its cost."

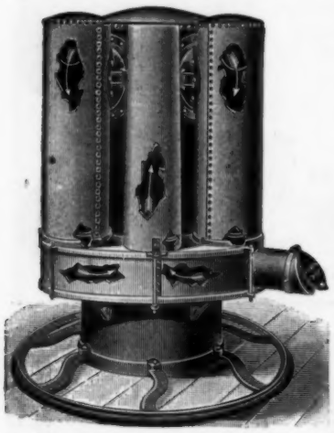
CLARK'S CELEBRATED UNDER-FEED FURNACE.

Is the best heater on the market for burning the cheaper grades of slack and nut coal.
Every part of this furnace is made with great care, and is very strong and durable.
The feeding device is hung oscillating.
The radiator is on the top.
The entire furnace is cast iron.
It has but three joints.
It is a comparatively smokeless furnace.
The grate does not shake but revolves.

WRITE FOR CATALOGUE

W. A. CLARK & CO.
35 PIKE STREET :: :: :: COVINGTON, KY.





Large Radiators, Easy to Clean Out.

A Furnace Recipe.

One Part, Good Material.
One Part, Good Design.
One Part, Good Workmanship.

This is the one we use in making the

AMERICAN FURNACE

Every furnace we make is guaranteed and our furnaces will bear comparison with any made. It is clean, durable and economical. A boiler-plate furnace, hence it don't crack.

The American Furnace Co.
1911-13 Pine Street, - ST. LOUIS. MO.

Burn Hard or Soft Coal or Coke. Large Doors.

Write for prices and secure the agency before the other fellow gets it.

L. B. HOOKER, Sturgis, Mich., writes: "Your paper is a grand success. I believe no tinner or plumber should do without it. I try to keep up with the times and the only way is to find out what other shops are doing and the way to do that is to take THE AMERICAN ARTISAN."

CHICAGO FURNACE SUPPLY CO.

64-66 W. MONROE STREET, CHICAGO.

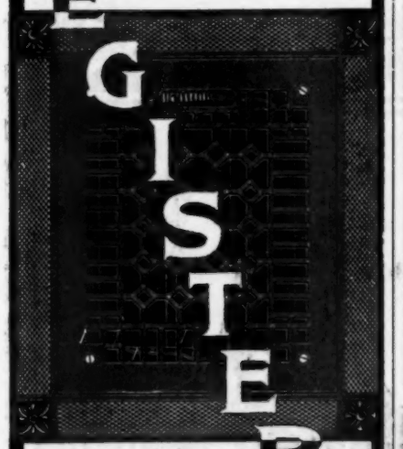
Pipe, Fittings, Elbows, Registers, Etc.

Not in the Association.
Our Prices Have Not Advanced.
Unsurpassed Equipment.
Catalog upon Application.

REGISTERS

WE MAKE RIGHT PRICES AND PROMPT SHIPMENTS

All Sizes—All Styles of Finish. Quality and Finish Unexcelled.



Henry & Scheible Co.
6-8-10 Long Street
CLEVELAND, O.

MODEL HUB C

The range that has more improvements than any range made. Investigate the advantages of the Sectional French Top in connection with Patent Broiler Hood.

Send for New Descriptive Circular just out.

SMITH & ANTHONY COMPANY, Boston, Mass.

ON ACCOUNT of the increased demand for the

Torrid Zone Furnace

we have been compelled to move our business into new and larger quarters. We now have the best equipped factory in the West for the manufacture of Furnaces, and are better prepared to supply our customers than ever before. Write

LENNOX CO.
MARSHALLTOWN, IOWA,

for prices and terms on *Hot Air Furnaces* and on *Combination Heaters.*

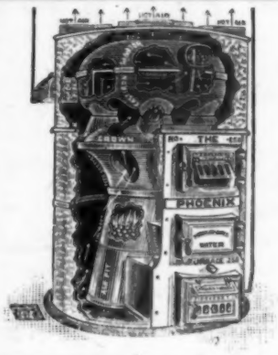
It Will Pay You

to illustrate your advertisements in your local papers. A sheet of comic advertising cuts sent on application

These cuts are furnished with catchlines showing their application to the hardware, stove and tinners' trades.

Address

DANIEL STERN
69 Dearborn St., - CHICAGO



The dealer who has on his floor a

Phœnix Furnace

makes no mistake. His trade is sure and continuous — undoubtedly the best **HOT AIR FURNACE** in the world and the greatest fuel saver on the market.

C. F. PALMER,
PHŒNIX IRON WORKS. UTICA, N. Y.

P. E. D. UNDERWOOD, Sullivan, Ill., writes:

"I value your paper very highly as authority on the subjects it treats."

ROUND OAK
STANDARD OF AMERICA

"Built Like a Corliss Engine"

A well-known "expert" in the steel-range business had an opportunity, once upon a time, to thoroughly examine the

Round Oak Steel Range,

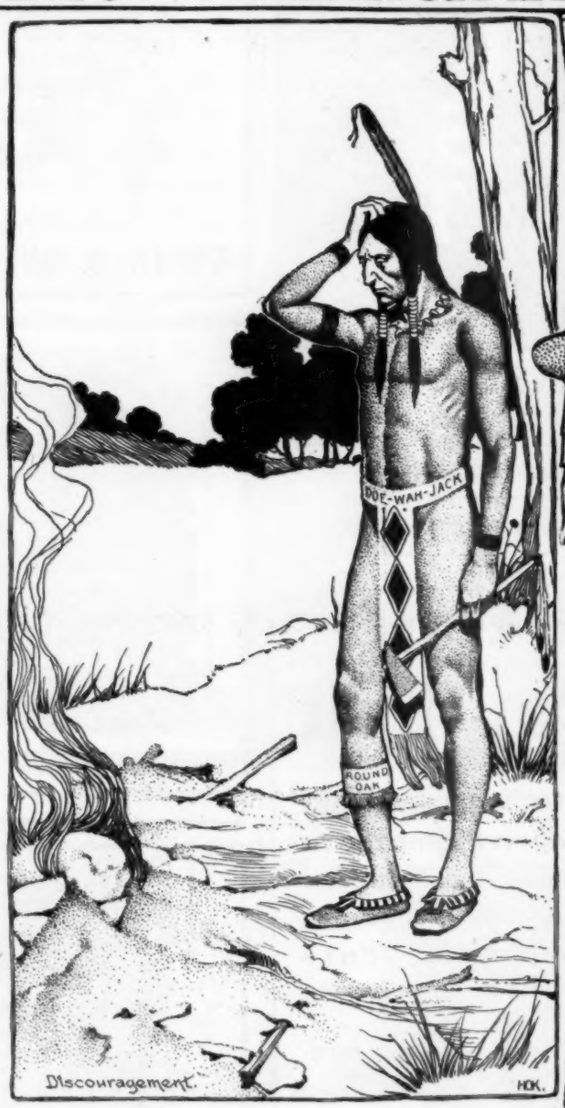
and among other very commendatory remarks he said:

"The Round Oak Steel Range is built like a Corliss Engine"

This appreciation, coming from a man who knows, seems to clinch our claim that our range is the finest example of steel-range making extant.
It is a fact that we do fit and make it better, use better material, and take more pains with it all the way, than other people do with theirs.
It will certainly interest the Stove Dealer who likes to sell

A Range of Quality.

Write for "The Book of the Range"—*it's worth seeing.*



Estate of P. D. Beckwith

Fred E. Lee, Manager

Dowagiac, Michigan

MAKERS OF GOOD GOODS ONLY

ESTABLISHED 1880.

THE AMERICAN ARTISAN & HARDWARE RECORD

Representative of the Stove, Tin, Hardware, Heating and Ventilating Interests.

PUBLISHED EVERY SATURDAY.

TERMS OF SUBSCRIPTION IN THE UNITED STATES, THEIR POSSESSIONS, AND CANADA, (Invariably in advance): ONE YEAR, POSTAGE PAID, $2.00.
IN FOREIGN COUNTRIES EXCEPT CANADA, ONE YEAR, POSTAGE PAID, $4.00.

Address all Letters, communications and remittances to

DANIEL STERN, PUBLISHER AND PROPRIETOR,
69 DEARBORN STREET, CHICAGO, ILL.

Entered at the Chicago Post Office as Second Class Matter.
THIS PAPER IS A MEMBER OF THE CHICAGO TRADE PRESS ASSOCIATION.

CHICAGO, JANUARY 16, 1904.

MISSOURI is nothing if not up to date in these days. The latest down there is a "chair of poultry" in one of her leading colleges. How to raise chickens will be taught at the University of Missouri. The curators have decided to offer a full course in poultry raising. A short course was offered last year, but this year the study is to be put on an equal plane with the studies in other departments, and full instructions in the breeding and handling of domestic fowls and the production of eggs will be given.

WE acknowledge the receipt of Vol. 1, No. 1, of the Northwest Implement Trade, published at Fargo, N. D. Burton W. McCracken, the editor, is the son of the late Thomas McCracken, for a number of years secretary of the Minnesota Retail Hardware Dealers' Association. Burton McCracken rendered acceptable science to this association in the capacity of assistant secretary. This new editor has a wide acquaintance in the Northwest. He knows how the retailers in the domains of the Gopher, Badger and Flickertail view the problems of the commercial battle. That he knows how to get out a paper is shown by the monthly before us, and we would say that if he can only maintain the Northwest Implement Trade at the same literary and news standard of Vol. 1, No. 1, his success would seem assured.

KOREAN commerce amounts, according to a statement just issued by the Department of Commerce and Labor through its Bureau of Statistics, to about fifteen million dollars per annum. Imports materially exceed exports, and according to the best statement that the Bureau of Statistics is able to obtain, amount to about ten million dollars, and the exports to about five millions. While in the case of China the foreign commerce of the country is carried on chiefly, almost exclusively, through the "treaty ports," this is not the case with reference to Korea, only about one-third of the foreign commerce above alluded to passing through the treaty ports.

American products, both manufactured and otherwise, are popular in Korea, but the very large proportion reach that country through China and Japan, and the direct trade of the United States with Korea is extremely small. It is only within a comparatively short time that the direct trade of the United States with Korea was of sufficient importance to justify a separate record. In 1897 the exports from the United States to Korea were $509 in value; in 1898, $125,000; in 1902, $251,000, and for the eleven months ending with November, 1903, $366,919, indicating that for the entire calendar year 1903 the total exports to Korea from the United States will amount to about $400,000.

THE much-discussed and yet over-green question—viz., manual versus machine labor, has lately been investigated afresh by an English statistician, who has evidently been at considerable pains to ascertain, from authoritative sources, the changed conditions arising out of the widespread substitution of mechanical for hand labor in the principal departments of industry in that country. The results obtained, it need hardly be said, have been of a nature to prove somewhat startling to those who have given no thought to this question. For example, in the Lancashire cotton industry what 1,100 spinners could do by hand, working in a factory or, as was very usual, at home, one machine attended by one man and two boys can do now; while one man with a machine can turn out the same amount of work that fifty weavers used to do by hand. In the pottery trade one attendant of a machine turns out as much finished material as 1,000 could do by hand. Then, again, in the loading of ships one man with machinery can do as much as 2,000 without its aid. Machinery for making steel ties saves 500 per cent; a paper machine, 95 per cent; a watchmaking machine, 85 per cent—an expert machinist being able to turn out from 250 to 300 watches a year. One nail machine can do the work of 1,000 men, and a horseshoe machine that of 500.

This universal use of machinery, by cheapening the cost of production, has added marvelously to the comfort and even luxury of all classes of our population.

"AREA, population, commerce, revenue, expenditures, indebtedness, currency and stocks of money of the principal countries of the world" is the title of a statement just issued by the Department of Commerce and Labor through its Bureau of Statistics. The statement includes all countries and colonies for which statistics of commerce and the other conditions above mentioned are available, and thus presents an approximately complete picture of commercial and financial conditions throughout the entire civilized world.

The total exports of the countries and colonies included are stated at $10,278,616,000 and the total imports at $11,525,755,000, making the aggregate commerce $21,804,391,000. For most of the countries the figures stated relate to the year 1902, in a few cases they are for 1901, and in some cases for 1903. The aggregate of the world's commerce at the present time may therefore be set down, in round figures, as 22 bil-

lions of dollars. While, presumably, all exports become, in turn, imports, the stated value of these imports exceeds by more than one billion dollars the stated value of the merchandise in question when stated as exports.

This increased value in the statement of merchandise imported when compared with the statement of value of the same merchandise when exported is accounted for in part by the value added through transportation, insurance, etc., and in part also by the fact that statements of value are more carefully and rigidly made when the goods are imported than in the statements supplied on exportation.

Compulsory Freight Service.

JOHN H. Leidigh, L. Seibel and Milo R. Harris, the committee on Demurrage and Transportation of the Southwestern Lumbermen's Association, has brought to our attention a petition they will shortly present to Congress requesting the enactment of a law regulating the movement and supply of freight cars.

If such a law should be enacted by Congress it will compel the railway companies to furnish an adequate number of cars to shippers, and it is contemplated that the railway companies shall also be compelled to supply sufficient equipment so that freight may be shipped without material delays. For several years shippers have complained of the lack of freight cars. It is said shippers have also lost hundreds of thousands of dollars because of delays of the railway companies in handling freight after it was on the tracks, and this year conditions have been worse than ever before. The Southwestern Lumber Association hopes to interest all of the leading mercantile interests of the United States in the proposed law. An active campaign will be made among all the great shipping interests throughout the country. At present there are state laws to control freight traffic, but there is no federal enactment that properly can control interstate traffic. It is requested of all shippers that they give the proposed law a careful study. The full text of the bill is as follows:

Be it enacted by the Senate and House of Representatives of the United States of America, in Congress assembled:

Section 1. It shall be the duty of every railroad company engaged in carrying, or giving bills of lading for carrying, personal property and live stock, between points in different states or territories, upon written application by any person for the carriage of any such property or live stock over the railroad of any such company or over such railroad and any connecting line or lines of railroad, to any point in another state of territory, to receive and commence the carrying thereof within five days after the offer of delivery thereof for such carriage, and any failure to receive or commence the carriage of such property or live stock by any such company in any such case shall entitle the person making such application to recover from such company, for each car necessary for such carriage, for each day after said five days during which such failure shall continue, a penalty of ten dollars, recoverable by such person as plaintiff against said company as defendant by a civil action in a circuit court of the United States for any district in which such company may have an office and agent for the transaction of any business, upon whom summons therein may be served.

Sec. 2. The provisions of the next preceding section shall apply not only to the initial railroad carrier to which such application shall be made, but also to any connecting railroad carrier engaged in such carrying of personal property and live stock, on any railroad line or part of a line between the point of the terminus of such initial carrier and the ultimate point of shipment to which connecting carrier said person shall make written application for the continued carriage of his property or live stock by such connecting carrier.

Sec. 3. It shall be the duty of every railroad company engaged in carrying personal property or live stock between points in different states or territories, whether so engaged as a sole carrier or as an initial or connecting carrier in such carriage, to transport and haul all cars furnished to any shipper for such carriage over its line of railroad from the starting point to the point of destination thereon of such shipment in such number of days of twenty-four hours each as will equal the number resulting from the division by the number fifty, of the total number of miles of carriage of said shipment over its lines of railroad by such company with or without any remainder by such division, and for each additional day occupied in such carriage over and above such number in completing such shipment, said company shall forfeit and pay to the consignee of such shipper for each car so furnished and transported the sum and penalty of ten dallars, to be recovered by him in the manner provided in the first section of this act.

Sec. 4. It shall not be a defense to any suit under the provisions of this act that the company sued did not have the cars necessary for any shipment applied for, or did not have the requisite equipment for the carriage or hauling thereof from the point of starting to the destination thereof, or any portion thereof, on its line of railroad.

Sec. 5. The penalties recoverable under this act may be sued for in one single count or statement in the petition or complaint without having a separate count for the penalty for each car for each day for which such penalty is given by this act.

We see no reason why the hardware world which is considerably interested in the handling of bulky freight should not heartily indorse the stand taken by lumber interests in this matter. Many hardware men are indeed lumbermen as well for that matter. We personally know hundreds of retail hardware men who have fretted and fumed over sidetracked barbwire or delayed stoves and who have regretted the absence of a tangible club to force railroads to perform their obvious duty as common carriers. The proposed law will force railroads to care adequately for their patrons. It will checkmate favoritism as between different shippers and shipping points, and curb a cheese-paring economy on the part of railroad officials. It should divert a portion of the current railroad earnings that now pour so steadily into Eastern stockholders' pockets in the shape of dividends into better equipment.

At present a number of railroads think they are doing all that should be required of them by periodically bawling out that there is a "car famine" abroad in the land. This no more exculpates them than did the enforced proclamation of his hideous disease cure the spots of the Levantine leper. Business interests know all about car famines. They know that these are the spawn of stockholders' greed and the whelps of official stinginess. They are past the point where they thirst for enlightenment. They want a cure administered in old-fashioned allopathic doses, for the ills from which business suffers particularly in smaller communities, and they deem it no more than just that the great arteries of distribution which enjoy special privileges, such as the right of eminent domain for example, should be compelled to fulfil those obligations which they as common carriers have assumed toward the commercial interests of the sections of country dependent on them.

RANDOM SKETCHES.

BY SIDNEY ARNOLD.

I FEEL like throwing up my job on THE AMERICAN ARTISAN in unalloyed disgust. It's a case of scoop, and that too by a sheet published within a thousand miles of St. Louis, whose title would lead one to believe it is a hardware paper, although it never had a representative at any important hardware meeting, and its loudly trumpeted "Special Issues" have appeared in leisurely time, perhaps, to allow such use as its editors might care to make of the complete reports published in THE AMERICAN ARTISAN promptly at the close of the various conventions. Mind you, I'm not saying they do this. Bless you, no.

These "Special Issues" always remind me of the radishes my brother-in-law raised when he decided to utilize his back yard on Ellis avenue, Chicago, for a garden. Their leaves grew so fast and were so large that they exhausted the plant and the roots shriveled to nothing. It would appear to me from all indications that any extra outlay for "Special Issues" made by this alleged hardware sheet, is, like the sap of these radishes, invariably absorbed in sending out quantities of letters soliciting advertisements, and "its appropriation is exhausted" when it comes to spending money in securing fresh convention reports and other live reading matter.

Revenons a vos moutons as I am getting away from that scoop which is given herewith:

GEORGIA HARDWARE MANUFACTURERS' ASSOCIATION.

"The American Hardware Manufacturers' Association of Georgia will meet in Atlanta in annual convention next May. The Kimball House has been designated as headquarters and the sessions of the convention will be held in the convention hall. As the attendance is expected to be large, the secretary announces it will be advisable to engage rooms in advance. The Kimball House has made a reduction in rates for the occasion for the reason that it is usual in these cases for the headquarters hotels to do so."

How's this for a simon pure scoop! The hardware manufacturers of Georgia are going to convene next May and no doubt another "Special Issue" will be heralded by the customary soliciting letter saying how greatly interested the retail hardware world is in the hardware manufacturers of Georgia.

Some of my friends may think that my rather candid remarks may stir up the ire of the printer who owns this enterprising sheet. Don't be alarmed, gentlemen, I am safe for the next six weeks anyway, as I shall spend my time largely at retail hardware conventions where there isn't the ghost of a chance of my running across the gentleman in question.

* * *

IN THE Inland Grocer I find an interesting interview on the cause of the large profits made by department stores in the course of which a leading Chicago business man makes the following remarks:

"Grocers and butchers employ men at $12 per week to wait upon customers and do the work of the store. In the grocery departments of department stores, however, girls are employed to do much the same work at $6 to $8 per week; I have figures from one of the leading department stores showing a profit in the grocery department of $40,000 for the year. They employ 200 girls at about $8 per week. The difference between girls' wages and the amount paid a man for the same work is $4 per week—$200 per year. This saving from the wages of 200 girls just equals the profit. If the girls obtained the same pay as men the grocery departments would be obliged either to quit cutting prices or do business at a loss."

* * *

FROM the Horton (Kan.) Headlight of Jan. 7 I take the following item: "W. G. Schlarb, the popular manager of the Joss & Graham hardware store, is also an undertaker. We have never tried it, but it ought to be a pleasure to a man to be laid away for keeps by as nice a fellow as Bill Schlarb."

* * *

IN the Berkeley, Cal., Gazette of Dec. 28th I learn "that Lund & Morch, the enterprising hardware dealers, are opposed to the disfigurement of the city by bill boards, as is shown by the fact that they have removed the unsightly bills from the fence surrounding their recently purchased property at the corner of Adeline street and Ashby avenue."

I would call the attention of these hardware dealers to the fact that there are several excellent real estate bargains along Grand Boulevard, Drexel Boulevard and other of Chicago's show streets. If they will kindly purchase some property here and show the same excellent taste they have shown in Berkeley nothing that Chicago can give will be too good for them. Places on the anti-crime committee and the directorships in the Municipal Art League will be theirs for the asking. By the way, if, in this age of multiplex organizations, there is such a body as a National Municipal Art League or a United States Anti-Bill Posting Association it seems to me that it should confer a loving cup or a gold medal or an engrossed honorary membership or something of the sort on the members of this California hardware firm.

* * *

WHAT hardware dealer in this country has the honor of having been in harness the longest? Hiram Hatch of Pierre, S. D., certainly has a strong claim to the honor in question. This gentleman was born in Chautauqua County, N. Y., in 1823, and in 1843 embarked in the hardware business in Wisconsin. In 1890 he removed to Pierre, S. D., where he again took up the same line of business. This makes sixty continuous years in the hardware world. On December 24th, last, Mr. Hatch celebrated his 80th birthday, receiving his friends at his hardware store all day. A large number of South Dakota citizens called to wish him many more years of life and prosperity.

* * *

AN important decision has been rendered in the case of the city of Atlanta, Ga., against the Chattanooga Pipe & Foundry Works and the South Pittsburg Pipe Co., giving that city the right to recover damages owing to excessive prices paid for purchasing a sewer system. It was claimed by the city that the several companies in the combine had agreed that the contract should go to the Anniston Foundry Co., Anniston, Ala., who in turn were to pay to the treasury of the combine a bonus to be proportionately divided among the members.

News Siftings

It is said that a new stove foundry will shortly be located at Tuscaloosa, Ala.

The Taunton Rivet Works, Taunton, Mass., were destroyed by fire on Christmas day at a loss of between $20,000 and $30,000.

Walter S. Pierce, Thornley Jackson and Frank H. Edmunds are among the incorporators of the Alabama Iron Co., Anniston, Ala., capitalized at $500,000.

The Portsmouth Stove & Range Co., Portsmouth, Ohio, whose plant was shut down two weeks ago for repairs and inventory, resumed operations on Jan. 11th.

The Columbus Stove Co., 276 West Main St., Columbus, Ohio, have leased property on Dublin Ave., that city, which will give them 1,100 feet of floor space for mounting purposes.

E. Reed Burns, Carrie E. Burns and Frank Lyman are the incorporators of the E. Reed Burns Metal Polish & Supply Co., New York City, capitalized at $2,000 for the manufacture of polishers' and platers' supplies.

The Foster Stove Co., Ironton, Ohio, will be represented in Ohio and Indiana during the coming year by Emil Schoup; F. R. McGrew will be their representative in Michigan and Illinois and T. L. Marting in Kentucky and West Virginia.

Lieut. Alfred Castle of the Comstock-Castle Stove Co., Quincy, Ill., was a recent visitor at THE AMERICAN ARTISAN office. Mr. Castle is deservedly popular and is one of the young men who have come rapidly to the front in the stove manufacturing business in the last few years.

D. M. Steward, R. B. Steward, Frank Spurlock, Foster V. Brown and others are the incorporators of the D. M. Steward Co., Chattanooga, Tenn., capitalized at $30,000. This firm are well known to the trade as manufacturers of electric insulators, lava gas tips of all kinds, slate pencils and crayons.

Few stove and steel range salesmen are better known than John Berger, who for a number of years has been selling the Champion double flue steel ranges, manufactured by the Champion Steel Range Co., Cleveland, Ohio. Mr. Berger has made a recent connection with the Baxter Stove Co., Mansfield, Ohio, and will hereafter acquaint the trade with the merits of the Banner stoves and ranges.

The C. H. Wurst Co., Quincy, Ill., send us a circular describing their Orinda air-tight heater. The cover is hinged in a special style and can be opened with a cover lifter which goes with each stove, thus doing away with the inconvenience of taking hold of the stove when more fuel is to be put on. Style E is made with refined steel body and heavy lining. It has sheet iron lower draft and nickeled screw damper.

The S. Obermayer Co., Cincinnati, O., Chicago and Pittsburgh, have been making some interesting computations concerning their 1903 output. During the year just passed this firm shipped 40 miles of foundry facings, foundry supplies, plumbago, black lead, etc. They shipped 4,410 full carloads, a net tonnage of 80,291, which converted into pounds equals 160,852,000 pounds. If it is averaged up at the rate of 30,000 pounds to the car it would take 5,353 cars to deliver this amount of goods. At the average rate of 30 cars to the trains, this would equal 178 train loads, and at an average of 34 feet to the car, allowing the usual space between cars and length of engines, these trains would extend for 40 miles. This is a record of which any firm would be justly proud.

MEETING OF WESTERN ASSOCIATION OF STOVE MANUFACTURERS.

The Western Association of Stove Manufacturers held a most successful and harmonious meeting at the Auditorium Hotel, Chicago, on Jan. 12. The condition of the trade during the past year and its prospects for the future year were thoroughly and carefully discussed.

Dickerson McAfee of the Thos. White Stove Co., Quincy, Ill., was unanimously elected president of the association and E. C. Hanrahan, for a number of years

President D. McAfee of the Western Association of Stove Manufacturers.

in charge of the Chicago office of the Peninsular Stove Co., and for the past year commissioner of this association, was re-elected to this office, and was also chosen as secretary of the association.

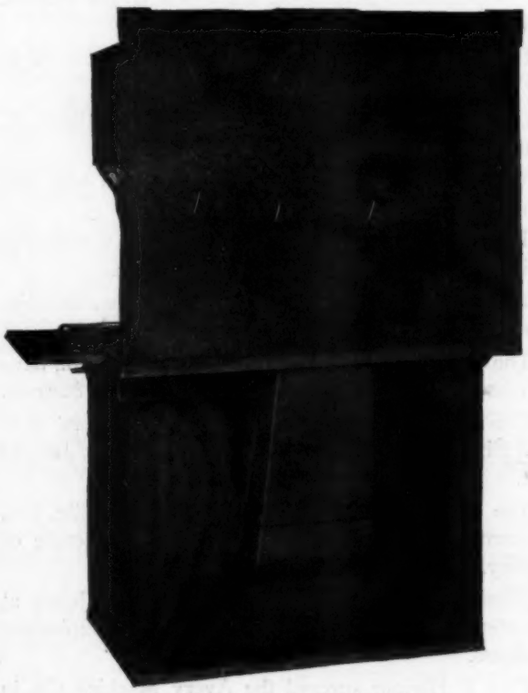
Mr. McAfee is one of the most popular and best known of the stove manufacturers in the middle West. He is a man of genial disposition, broad gauge, rare energy and good executive ability, and for several years past he has served with distinction as president of the Board of Education in Quincy, which position he resigned on the first of the year to act as Commissioner for the Freight Bureau in that city. For a num-

ber of years he has performed faithful and important work for the stove fraternity by his services as member of the Executive Committee of the Stove Founders' National Defense Association. Mr. McAfee was born in Shelbyville, Mo., June 24, 1848, and entered the employ of the Thos. White Stove Co. in 1869 when he was in his 21st year.

The Western Association of Stove Manufacturers are to be congratulated on securing the services of so conscientious and able a president as Mr. McAfee.

CHICAGO MALLEABLE STEEL RANGE.

The accompanying cut is that of a steel range, and it is perhaps the only straight hind view ever made of a malleable or any other kind of a steel range. The Chicago Malleable Steel Range Co., 194-202 Mather



Rear View Chicago Malleable Steel Range.

street, Chicago, had this cut made to show the superior height of their malleable shoe, which extends 8 inches above the turn and prevents soot where coal is used or creosote where wood is used from eating into the steel. This use of malleable steel, Mr. Millsap of this firm advises us, is vastly superior to sheet steel, and hence having nothing to conceal, this firm freely show this rear view.

ILLINOIS STOVE FOUNDRIES START UP.

The Chicago Stove & Range Co., Chicago, will control the output of the Charleston Foundry & Stove Works, Mattoon, Ill., and the Mississippi Valley Stove Co., at Fulton, Ill. The latter concern, although under the management of this Chicago firm, will sell direct to the trade, their goods being marketed under the old trade-mark name of Solar stoves and ranges, with which the trade in the middle West are quite familiar. These goods, however, will be materially modified and will be made in improved patterns. This Fulton foundry will be placed in operation by the first of February with a force of 100 men. Already at the present time the builders and machinists are actively at work making extensive improvements and installing new machinery so that the building will be ready at the date mentioned.

The Mattoon plant owned by this concern, which still maintains its former title of Charleston Foundry & Stove Works, ran for a few days during the latter part of December and will open up on Jan. 18 next and run continuously during the balance of the year. There are now over 100 men on the pay roll of this plant, and it is expected that more will be added later. The goods made at this foundry consist of the America line of stoves and ranges, including four lines of low and medium priced oaks, and are handled by Chicago Stove & Range Co.

SPECIAL STOVE POLISHES.

The Nickel Plate Stove Polish Co., 459-461 Illinois St., Chicago, send us a little catalogue calling attention to their line of stove polish, stove putty, asbestos cement, roofing cement, metal polish, aluminum enamel and iron enamel. Their brands of goods include Black Jack stove polish, Black Eagle stove polish and Black Kid stove polish, Peerless iron enamel, Peerless aluminum enamel, Wizard metal polish, Russian asbestos cement, Russian stove putty and Russian roofing cement. Their Black Jack paste is designed for parlor stoves, pipes, etc. When put up for stove dealers' use in five pound cans it is desirable for new and old stoves, as it can be reduced with water without benzine. Their Black Eagle liquid is put up for family use in 10 pound cans and is especially adapted for use on Russian iron stove pipes, etc. Their Black Kid paste is a turpentine polish. It is water proof and is especially adapted for use on sample stoves. Their Peerless aluminum enamel looks like frosted silver. It is moisture proof and is of great value for use in enamaling open plumbing work, radiators, steam and gas pipes, stoves, oven doors, structural iron work, picture moulding, etc. Their Peerless iron enamel is for use on stove pipes, grates, registers, fenders, railings and for any purpose where a jet black glossy surface is required. Their Wizard metal polish is put up in liquid form only. Their Russian asbestos cement is designed for mounting and packing joints and seams in furnaces, heaters, ranges and stoves making them gas tight. Their Russian roofing cement may be applied to any kind of wood, brick, tin or glass. One of these catalogues will be furnished the trade on application. When writing for same kindly add: "Saw it in THE AMERICAN ARTISAN."

MEETING OF COLORADO RETAIL HARDWARE DEALERS' ASSOCIATION.

F. C. Moys, Boulder, Colo., secretary of the Colorado Retail Hardware Dealers' Association, advises us that headquarters have been secured for the second annual meeting of that association, which will be held at Denver on Feb. 15, at the Windsor Hotel, that city. This association is in a most flourishing condition, and this forthcoming convention will be the largest in their history.

The Hardware Record.

American Hardware Mnfs. Assn.

Pres., J. C. Birge, St. Louis, Mo.
Vice Pres.—F. S. Kretsinger, Ft. Madison, Ia.; Henry B. Lupton, Pittsourgh, Pa.; Geo. W. Corbin, New Britain, Conn.
Secy.-Treas., F. D. Mitchell, Phila.
Ex. Com., C. W. Asbury, Philadelphia, Pa.; Chairman; Robert Garland, Pittsburg, Pa.; N. A. Gladding, Indianapolis, Ind.; Geo. P. Hart, New Brit in, Conn.; Wm. M. Pratt, Greenfield, Mass.; W. S. McKinney, Allegheny, Pa.; E. G. Buckwell, Cleveland, Ohio; E. B. Pike, Pike Station, N. H.

Arkansas Retail Hdw. Dealers' Assn.

Pr s., J. F. Maxey, Ozark.
1st V.-P., H. Williams, Hot Springs
2d V.-P., A. L. Skillern, N shville.
S.-T., C. E. Taylor, Little Rock.
Ex. Com., C. T. Rosenthal, Batesville; T. B. Stewart, Newport; E. E. Mitchell, Morrillton; W. M. Graham, Clarendon; R. F. Roys, Russelville.

Chicago Retail Hdw. Dealers' Assn.

Pres., H. E. Gnadt.
V.-P., G. A. Neeb.
Sec., G. R. Lott.
Collector, John Hora.
Treas., J. L. Smith.

Hardware Merchants' and Manufacturers' Assn. of Philadelphia.

Pres., William C. Peters.
V.-P., Thomas Devin.
Sec.-Treas., T. James Fernley.
Directors, W. W. Supplee, H. McCaffrey, E. S. Jackson, W. C. Peters, S. Disston, E. Fisher, J. H. Ritter, T. Devlin, T. J. Fernley.

Illinois Retail Hdw. Dealers' Assn.

Pres., Charles H. Williams, Streator.
V.-P., W. T. Gormley, Chicago.
Sec., L. Nish, Elgin.
Treas., Geo. A. Engelhardt, Chicago.
Ex. Com., Charles H. Williams, Streator; W. T. Gormley, Chicago; L. Nish, Elgin; Geo. A. Engelhardt, Chicago; William Bittel, Peoria; F. F. Porter, Chicago; H. G. Cormick, Centralia; H. N. Murphy, Galesburg; R. G. Scheurer, Vandalia.

Indiana Retail Hdw. Dealers' Assn.

Pres., E. M. Bush, Evansville.
1st V.-P., A. N. Shidler, So. Bend.
2d V.-P., W. B. Shipley, LaFayette.
Sec.-Treas., M. L. Corey, Argos.
Ex. Com., M. L. Lewis, Marion; W. P. Lewis, New Albany; Charles Boonshat Petersburg; E. M. Bush, Evansville; M. L. Corey, Argos.

Indian Territory Retail Hdw. Assn.

Pres., J. G. Smith, Canadian.
1st V.P., Fred Parkinson, Wagoner.
2d V.-P., E. C. Stretch, Vinita.

Iowa Retail Hdw. Dealers' Assn.

Pres., S. R. Miles, Mason City.
V.-P., L. Lindenberg, Dubuque.
Sec., H. S. Vincent, Ft. Dodge.
Treas., A. C. Vieth, Oakland.
Members Exec. Com., Jacob Seither, Keokuk; J. F. Doty, West Liberty; L. Lindenberg, Dubuque; S. R. Miles, Mason City; G. C. Paulson, Newhall; Paul DeVol, Council Bluffs; C. S. Barger, Albia; L. H. Kurtz, Des Moines; C. R. Keating, Mt. Ayr; L. A. Gnam, Carroll; C. E. Haas, LeMars.

Kansas Hardware Dealers' Assn.

Pres., Oscar Roehr, Topeka.
V.-P., E. J. King, Logan.
Sec.-Treas., J. A. Cole, Topeka.
Ex. Com., F. W. Bartlett, Kansas City; T. H. Kiniry, Beloit; J. M. Walters, Robinson; J. H. Hamilton, Arkansas City; T. J. O'Neill, Osage City.

Kentucky Retail Hardware and Stove Dealers' Association.

Pres., W. T Oldham, Mt. Sterling.
1st V.-P., W. S. Shacklett, Fulton.
2d V.-P., Jos. C. Kirchdorfer, Louisville.
Sec., Paul Wagner, Louisville.
Treas., Henry Heick, Louisville.

Michigan Hardware Association.

Pres., John Popp, Saginaw.
V. Pres., F. M. Brockett, Battle Creek.
Treas., Henry C. Weber, Detroit.
Sec., A. J. Scott, Marine City.
Ex-Com., W. P. Culver, Portland; K. S. Judson, Grand Rapids; J. H. Whitney, Merrill; E. J. Morgan, Cadillac; T. Frank Ireland, Belding; Fred. S. Cook, Fowlerville; C. E. Pipp, Otsego; A. Harshaw, Delray; A. J. Scott, Marine City.

Minnesota Retail Hardware Assn.

Pres., W. H. Tomlinson, LeSueur.
V.-P., H. S. Cleveland, Minneapolis.
Treas., W. E. Barto, Long Prairie.
Sec., M. S. Matthews, Mnpls.
Ex. Com., W. H. Tomlinson, Le Sueur; H. S. Cleveland, Minneapolis; F. E. Hunt, Red Lake Falls; Benj. F. Kernkamp, St. Paul; C. H. Hornburg, New Ulm; J. Cowing, Alexandria; C. H. Casey, Jordan; C. F. Ladner, St. Cloud; J. Schmidt, Wabasha; A. T. Stebbins, Rochester; J. McGuire, St. Paul.

Missouri Retail Stove and Hardware Dealers' Association.

Pres., Tayler Frier, Louisiana.
V.-P., E. L. Wachter, St. Louis.
Sec., F. N. Neudorff, St. Joseph.
Ex. Com., J. W Poland, Carrollton; F. N. Kannsteiner, St. Louis; W. T. Shoop, Richmond.

National Hardware Association.

Pres., S. A. Bigelow, Boston.
1st V.-P., John C. Koch, Milwaukee.
2nd V.-P., Brace Hayden, San Francisco.
Ex. Com., F. Barker, Elmira, N. Y.; J. D. Moore, Birmingham, Ala.; John Freeman, Detroit; P. E. Strauss, Boston; R. M. Dudley, Nashville; W. S. Wright, Omaha.
Advisory Board, W. W. Supplee, Philadelphia; H. H. Bishop, Cleveland; John Bindley, Pittsburg; R. A. Kirk, St. Paul.

Nebraska Retail Hdw. Dealers' Asn.

Pres., C. A. Peterson, Oakland.
1st V.-P., Nathan Roberts, Omaha.
2d V.-P., Alex Meyer, Hastings.
3d V.-P., Frank Hacker, Friend.
Sec.-Treas., Harry Hall, Lincoln.

National Retail Hdw. Dealers' Asn.

Pres., W. P. Bogardus, Mt. Vern n, O.
V.-P., C. H. Miller, Huntington, Pennsylvania.
Sec., M. L. Corey, Argos, Ind.
Treas., A. T. Stebbins, Rochester, Minn.
Ex. Com., H. G. Cormick, Centralia, Ill.; Sharon E. Jones, Richmond, Ind.; T. F. Ireland, Felding, Mich.; L. Lind nberg, Dubuque, Iowa; A. T. Stebbins, Rochester, Minn.

N. Dakota Retail Hdw. Dealers' Asn.

Pres., H. N. Joy, Hamilton.
1st V.-P., H. F. Emery, Fargo.
2d V.-P., Frank Lish, Dickinson.
3d V.-P., H B. Allen, Jamestown.
Sec., C. N. Barnes, Grand Forks.
Treas., W. H. Pinkerton, Lakota.
Ex. Com., E. E. Elliott, Sanborn; H. F. Strehlow, Casselton; Hurbert Harrington, Fargo.

Ohio Hardware Association.

Pres., W. P. Bogardus, Mt. Vernon.
V.-P., J. F. Baker, Dayton.
Cor. Sec., D. R. Burr, Piqua.
Fin. Sec., W. C. Jones, Columbus
Treas., H. A. Waller, Ravena.
Ex. Com. F. A. Powers, Norwalk Geo. Hartke, Cincinnati; E. Fisher, Wapakoneta; J. C. Snyder, Ironton; E. M. Potter, Cleveland.

Pennsylvania Retail Hdw. Assn.

Pres., Geo. L. Moore, Brownsville
V.-P., Geo. J. Rudolph, Pittsburg
Sec., J. E. Digby, McKees Rocks
Treas., B. A. Maggine, Braddock
Ex. Com., E. E. Lyon, Greensburg; C. N. Savage, California; B A. Maggine, Braddock; C. O Shroyer, Dawson.

St. Louis Stove Dealers' Assn.

Pres., Wm. H. Hahn.
1st V.-P., G. A. Pauly.
2d V.-P., E. L. Wachter.
Sec., Louis Boehl.
Treas., E. Wertz.

Southern Hardware Jobbers' Assn.

Pres., W. M. Crumley, Atlanta, Ga.
1st V.-P., John Donnan, Richmond, Va.
2d V.-P., E. A. Peden, Houston, Texas.
Ex. Com., Bruce Keener, Knoxville, Tenn.; Chas. Ireland, Greensboro, N. C.; O. B. Barker, Lynchburg, Va.

Texas Ret. Hdw. and Imp'l't Assn.

Pr s., S. L. Erwin.
1st V.-P., W. M. Grunnell.
2d V.-P., J. D Carroll.
Sec'y, J. W. McManus.

Wisconsin Hdw. Dealers' Assn.

Pres., L. Findiesen, Green Bay.
V.-P., H. L. McNamara, Janesville.
Sec -Treas., C. A. Peck, Berlin.
Ex. Com., J. Kornelly, Milwaukee; E. H. Ramm, New London; H. S. Scofield, Sturgeon Bay; R. Murdoch, Beloit.

THE AMERICAN ARTISAN AND HARDWARE RECORD is the only publication containing western hardware and metal prices corrected weekly. You will find these on pages 40 to 44 inclusive.

T. C. Dejean, a Plankinton, S. D., hardware dealer, was victim of a recent fire.

Charles Tabor succeeds Gardner & Reif in the hardware business at Ionia, Ia.

J. V. Eaton succeeds Landis & Johnson in the hardware business at Danville, Ia.

The Champion Shear Co. are a new Bridgeport, Conn., concern capitalized at $18,000.

The Washington Cutlery Co., Milwaukee, Wis., have increased their capital stock to $75,000.

The American Screen Co. are a new Grand Rapids, Mich., concern capitalized at $5,000,000.

Hodges & Ewing succeed Horner & Johnson in the hardware business at Nelson, Minn.

C. A. Myers will travel in Oklahoma for the A. J. Harwi Hardware Co. of Atchison, Kans.

The Noxubee County Hardware Co. are a new Macon, Miss., concern capitalized at $15,000.

The Standard Metal Furniture Co. are a new Detroit, Mich., concern capitalized at $325,000.

The Groenendyke Washing Machine Co., Middletown, Ind., will be removed to Richmond, Ind.

The Clayton Hardware Co., Lewisburg, Tenn., have increased their capital stock from $16,000 to $20,000.

The directors of the Ohio Hardware Dealers' Mutual Fire Insurance Co., met at Coshocton, O., Jan. 12 last.

The Mosser Mfg. Co. are a new Hughesville, Pa., concern capitalized at $5,000, for the manufacture of cutlery.

Jones & Martin are successors to S. A. Jones at Deshler, O., in the hardware store and implement business.

Folk & Hopper succeed the Avery Machine Co. in the hardware, stove and implement business at Bowling Green, O.

The Ohio Gas Engine Works, Philadelphia, Pa., have increased their capital stock from $600,000 to $2,500,000.

The foundry of the Alamo Mfg. Co., Hillsdale, Mich., makers of gasolene engines, was destroyed by fire recently.

Ernest L. Hill and John F. Weathers are interested in a new refrigerator factory which will be started at Columbus, Ga.

The plant of the Indiana Wire & Nail Co., Muncie, Ind., was shut down on Jan. 5th on account of a strike of the wire drawers.

George Krause, senior member of George Krause & Co., Lebanon, Pa., hardware dealers, is confined to his bed by severe illness.

J. J. Brown, R. A. Brown and J. H. Thomas are the incorporators of the Leader Hardware Co., Temple, Mo., capitalized at $10,000.

Richard Collings, Alfred C. Griscom and T. E. Pigott are the incorporators of the Collings-Griscom Co.,

New York, capitalized at $20,000, for the manufacture of pumps.

Krell Bros., Pisek, N. D., hardware dealers, are victims of a severe fire, which destroyed the business portion of that town on Jan. 6.

The Kelly Ax Co. have sold their factory at Alexandria, Ind., to a syndicate of Kentucky and West Virginia capitalists for $800,000.

David Eastman, R. Schweitzer and Sam T. Bundhus are the incorporators of the Eastman Cutlery Co., Portland, Me., capitalized at $50,000.

Stephen J. McCerdee, Thomas J. Reilly and Michael Blake are the incorporators of the International Iron & Metal Co., Newark, N. J., capitalized at $30,000.

The Reinke & Shirray Manufacturing Co. are a new Detroit, Mich., concern capitalized at $10,000 for the manufacture and sale of hardware.

J. C. Duke, B. M. Estes and D. O. Baker are the incorporators of the Baker Hardware & Implement Co. of Granbury, Tex., capitalized at $25,000.

H. C. Davis, H. C. Davis, Jr., and George J. Costello are the incorporators of the Kokomo Bit & Tool Co., Kokomo, Ind., capitalized at $10,000.

The Burdick-Corbin Co. succeed the Burdick-Dubois Manufacturing Co. at New Britain, Conn. The new firm will have about 150 men in their employ.

Thos. G. Dale, Walter W. Marquis and Frank L. Zaher are the incorporators of the Kansas City Wheelbarrow Co., Kansas City, Mo., capitalized at $10,000.

J. P. Koehler, Sr., L. C. Koehler and M. L. Tygard are the incorporators of the Pittsburgh Machinery & Gas Engine Co., Pittsburgh, Pa., capitalized at $10,000.

Joseph A. Welsh, Mortimer W. Byers and Mark H. Solomon are the incorporators of the 20th Century Paint Co., New York City, capitalized at $40,000 for the manufacture of paint.

Arthur Delapierre, Clarence H. Housel and M. E. King are the incorporators of the International Handle Co., New York, capitalized at $30,000 for the manufacture of wooden handles.

John T. Mitchell, Sims Ashley, Jack Mitchell, E. Davis Mitchell and J. B. McLemore are the incorporators of the Mitchell-Ashley Hardware Co., Columbia, Tenn., capitalized at $10,000.

Homer Anderson, C. W. McCutcheon and Arthur H. Elliott are the incorporators of the Phaeton Heater Co., Peekskill, N. Y., capitalized at $31,000 for the manufacture of gas water heaters.

R. M. Daniels is interested in a new firm for the manufacture of automatic washing machines, dish washers and sanitary milk cans, which will shortly begin business at Appleton City, Mo.

Johnsend Bros., Fertile, Minn., hardware dealers, have gone into bankruptcy with liabilities of $10,000 and assets of $15,000. Their assets consist of $8,000 in goods and $7,000 in book accounts.

W. S. Newkirk has severed his connection with the United States Heater Company, Detroit, Mich., and has accepted the position of general representative of The Prizer-Painter Stove & Heater Company, Reading, Pa., manufacturers of the Henderson steam and hot water heaters.

T. E. Ryan, C. W. Newberry and Margaret O'Mally are the incorporators of the Waukesha Expanding Metal Company, Waukesha, Wis., capitalized at $40,000, for the manufacture of metal lath.

The Peck-Hammond Co., 309 West Fourth St., Cincinnati, O., heating and ventilating engineers, send us a pretty little calendar, showing a reproduction of W. M. Post's picture, entitled "Dying Day."

Francis I. Brownell, a Hailey, Idaho, hardware dealer, was a recent visitor at THE AMERICAN ARTISAN office. Mr. Brownell has done an excellent year's business and is well satisfied with the outlook for 1904.

The Executive Committee of the Texas Retail Hardware and Implement Dealers' Association did not meet on Dec. 29 to make arrangements for a meeting of that association, the aforesaid meeting being indefinitely postponed.

P. B. Birong, Chicago; R. G. Richmond, St. Louis; Wm. Rosenthal, San Francisco; Cal. W. A. Moorhouse, Detroit, and A. F. Gabell, Philadelphia, will travel for the Thos. W. Houchin Co., New York City, manufacturers of household specialties.

It is said the hardware and implement dealers of Ohio, West Virginia and Pennsylvania held a secret meeting at Wheeling, W. Va., on Jan. 8th for the purpose of forming an organization for regulating prices and preventing retailing by manufacturers.

The Caldwell Bit & Auger Co., Columbus, Ohio, capitalized at $100,000 for the manufacture of bits, augers and screws patented by John W. Caldwell, have organized with the following board of officers: President, John W. Caldwell; vice president, Warren Herron; secretary, Cornelius J. Breene; treasurer, Elmer Gafford; directors, J. W. Caldwell, Elmer Gafford, Joseph E. Nicholson, Warren Herron and Albert M. Donovan.

While C. S. Barger, Albia, Ia., a member of the Executive Committee of the Iowa Retail Hardware Dealers' Mutual Fire Insurance Association, was attending the meeting of that association at Mason City, Jan. 8 last, a couple of gentlemen visited his store whom Mr. Barger deeply regretted missing seeing. When he returned to Albia he also regretted missing seeing about $125 in guns and revolvers and $100 in cash. It will be some time, too, before he writes a testimonial on the burglar proof qualities of his store safe.

William N. Pelouze of the Pelouze Scale Co., Chicago, was granted patents on Jan. 12 on a single-piece sheet metal scale case and blank therefor and a weighing scale. The postal weighing scale frame comprises a base in combination with a pillar-like scale case erected thereon and composed of a single piece of sheet metal stamped and folded to form the back, sides, top and front of the case. The forward edges of these sides are scalloped and the scale plate is erected upon this base and has its upper end secured upon the front portion of the case.

The American Cutlery Co., Chicago, will be represented on the road during the following year by Albert

W. Moore in sections of Illinois, Indiana, Ohio and Michigan; Henry Hirsch will look after their interests in the West and Northwest; J. H. Keating will represent them in Southern territory; B. S. Loeb will look after their interests in Ohio, Indiana, Illinois, Missouri, West Virginia, Pennsylvania, New York, New England, Maryland, Kentucky, Canada and Georgia; G. A. Richman will do proselyting work for them in New York and New England.

The United States Wire Mat Co., Decatur, Ill., are sending their trade a very beautiful calendar showing one of Bryson's most exquisite pictures, viz., a danseuse in black and red, gracefully reclining on a red plush sofa. The subtle charm of this picture lies in its exquisite blending of red and black tints. The trade will find this piquant child of the stage with her same *moue,* studied repose and harmonious background, an attractive wall ornament. When writing for same kindly add: "Saw it in THE AMERICAN ARTISAN."

The Stowell Mfg. & Foundry Co., South Milwaukee, Wis., are extending a most cordial invitation to the members of the Wisconsin Retail Hardware Dealers' Association to take a trolley ride to visit their plant during the convention next February. This large plant devoted to the manufacture of hardware specialties is easily reached from the Republican House, where the dealers will be in session, as the South Milwaukee car leaves the city hall, just across the river from the Republican House, every half hour. There is no question but that a large number of dealers will avail themselves of this kind invitation.

SAWS.

E. C. Atkins & Co., Inc., Indianapolis, Ind., with branch houses at Memphis, Minneapolis, Atlanta, New York City, Portland, Ore., Seattle, Chicago and Toronto, send us their handsomely printed cloth-bound 1904 catalogue. In looking this volume over we notice a large number of new goods added, including No. 3 duplex pruning saws, taper pruning saws, Nos. 5, 6 and 7, butcher saws, Nos. 11 and 12, Atkins improved hack saw blades, rail hack saws, plumber's saw, Perfection floor scrapers, wall scrapers, special floor scrapers and cabinet scrapers, No. 7 corn knife, No. 8 hedge knife, leveling block, Pribnow's improved swage shaper, brazing tables, Carson's saw patching machine, Young's band saw filer, Atkins double end grinder, Atkins "AAA" emery wheels, Atkins O. K. saw guard, Goodyear load binder, and babbitt metal.

The medals this firm have received are the First Medal of the Centennial Exposition, held at Philadelphia, 1876; Highest Awards on circular, cylindrical, band, gang, drag, cross-cut and band saws for variety exhibited, material, workmanship and finish, at the World's Columbian Exposition, 1893; two gold medals at the Exposition Universelle International, Paris, 1900—one for best circular and band saws, the other for best cross-cut and hand saws. At the Pan-American Exposition, held at Buffalo in 1901, they received the Highest Awards on circular, bands, gang, drag, cylinder and mill saws, cross-cut hand and small saws and saw tools. They have received many other medals, including those awarded by the Cotton States Expositions at New Orleans and Atlanta.

Their success in their band saw department is due to the use of Atkins silver-steel, which is very tough and flexible, and also to their up-to-date machines and operatives, and their facilities for securing absolute uniformity of temper.

The Atkins cross-cut saws are leaders in quality of material and temper; in perfect fitting for use; in general finish and appearance; in the great variety of styles; in adaptability to all sections and kinds of timber and in fast-cutting and light-running qualities.

Leading brands of Atkins saw tools are the "Excelsior," "Perfection," "Diamond," "Leader," "Dexter" and "Criterion."

Atkins wireless saw vise has all wearing parts reinforced. It has rubber cushions in the jaws to prevent any disagreeable noise. This vise operates with the lock lever principle. With this vise the saw can be gauged or adjusted with both hands. One of these catalogues will be forwarded the trade on application. When writing for same kindly add: "Saw it in THE AMERICAN ARTISAN."

SCORE EPICUREAN BULL'S-EYES.

The annual reunion of salesmen of the Peters Cartridge Co., Cincinnati, was held at that city on Jan. 11 to 15, inclusive. The program for this reunion was as follows:

MONDAY.

6:30 p. m. Roll-call and Supper.

TUESDAY.

10:00 a. m. Conference with Salesmen.
2:00 p. m. Address and General Instructions, by the President.
6:00 p. m. Salesmen's Smoker.

WEDNESDAY.

10:00 a. m. Conference with Salesmen.
8:00 p. m. Theatre. Ezra Kendall in "The Vinegar Buyer."

THURSDAY.

8:15 a. m. Inspection of Factories. Special cars leave Sycamore street terminal at 8.15 sharp. Returning, leave King's Mills at 3:30 p. m.
6:30 p. m. Banquet.

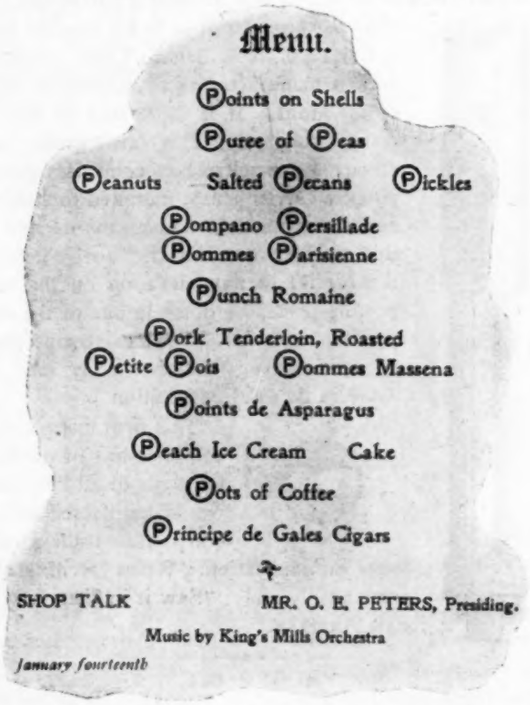
FRIDAY.

9:00 a. m. Special car leaves Fountain Square for Cincinnati Gun Club grounds.
11:00 a. m. Team Shoot.
12:30 p. m. Dinner.
1:30 p. m. Exhibition Shooting.
2:30 p. m. Compass Team Shoot.
3:30 p. m. Return to City.
8:00 p. m. Au Revoir.

These annual reunions are proving a more interesting and valuable feature with the advancing years. The large augmentation of the number of salesmen of this house who participate in this affair is an admirable index of the constantly extending business of this concern. L. R. Myers, cashier of this company and one of the indefatigable workers who have pushed the name and fame of Peters cartridges to the fore, is entitled to having a big chalk mark placed opposite his name for his admirable work in making these reunions so marvelously successful from any standpoint at which we may look at the matter. His personality has done much towards strengthening that feeling of

unity that all Peters people feel and which has been so dominant a factor in their conspicuous success.

The crowning event of this reunion was the banquet, held Thursday evening, Jan. 14. The cover of the menu card for this banquet was a cardboard imitation of a Peters League Cartridge loaded with best black powder. Although "peas" were the only article on the bill of fare the army of salesmen and visitors to this banquet fared sumptuously. A glance at the subjoined


Menu.

Points on Shells

Puree of Peas

Peanuts Salted Pecans Pickles

Pompano Persillade

Pommes Parisienne

Punch Romaine

Pork Tenderloin, Roasted

Petite Pois Pommes Massena

Points de Asparagus

Peach Ice Cream Cake

Pots of Coffee

Principe de Gales Cigars

SHOP TALK MR. O. E. PETERS, Presiding.

Music by King's Mills Orchestra

January fourteenth

menu shows that the "peas" eaten were not the familiar legumes, but covered the whole gamut of gastronomic dainties.

Surely Fred Tuttle, general sales manager of this company, who had charge of the entertainment, is to be congratulated on the felicitious alliteration of this menu, every article on which begins with the letter "P," emblematic of this firm's goods, and each of these "Ps" is the center of a bull's-eye. It is hardly needless to add that the force of this firm showed themselves as adept in scoring culinary bull's-eyes, as they have proven in scoring other bull's-eyes in tournaments and other shooting contests.

Covers were laid for 66 at this unique and delightful banquet, as follows:

Cincinnati Office—O. E. Peters, F. C. Tuttle, L. R. Myers, Edw. Frohliger, E. R. Merckel, G. S. McDowell, Jr., G. M. Peters, J. H. McKibben, A. M. Beekley, E. F. Garrett, E. R. Crary, C. Goule, A. L. Peters, Chas. M. Peters, P. G. Orr and J. A. Addleman.

Factories—A. King, M. F. Lindsley, H. L. King, George G. King, W. B. Place, Frank See, N. L. Richmond, Elmer Griesmer and R. A. King.

New York Office—T. H. Keller and G. E. Cook.

Pittsburg Office—C. G. Grubb and W. M. Locke.

St. Louis Office—F. B. Chamberlain.

Salesmen—J. S. French, John Parker, Maurice Kaufmann, J. W. Osborne, L. H. Reid, L. I. Wade, George E. Bartlett, J. W. Hightower, L. M. Knouse, George R. Benjamin, T. H. Keller, Jr., H. B. Lemcke, Neaf Apgar, E. H. Storr, Paul R. Litzke, A. C. Thoms, LeRoy Leach, H. N. Kirby, D. D. Gross, Wallace R. Miller, J. E. Reid, W. W. Porter, Frank Carter, A. T. Davenport, Dave Elliott and A. H. Hardy.

Guests—W. E. Keplinger, R. S. Elliott, Geo. W. Welles, G. G. Bogue, B. B. Tuttle, W. W. Webber, T. H. Scovell, G. D. Palmer, Paul R. Howard and Judge J. A. Runyan.

On Friday a number of team shoots were held on the grounds of the Cincinnati Gun Club, the opposing teams being as follows:

Friday, January 15.

TEAM SHOOT. 25 TARGETS.

W. B.'s.	H. B.'s.
Tuttle.	Keller.
French.	Keller, Jr.
Parker.	Lemcke.
L. H. Reid.	Apgar.
J. E. Reid.	Storr.
Lindsley.	Benjamin.
Richmond.	C. M. Peters.
Frohliger.	Gross.
Hightower.	Bartlett.
Osborne.	Elliott.
Kaufmann.	Thoms.
Wade.	Kirby.
Porter.	Carter.
Davenport.	See.
Litzke.	H. L. King.
Miller.	Leach.
Myers.	Hardy.

COMPASS TEAM SHOOT. 25 TARGETS.

North.	South.
Tuttle.	Porter.
French.	Hightower.
Myers.	Osborne.
L. H. Reid.	Kaufmann.
Parker.	Wade.
J. E. Reid.	Miller.
Lindsley.	Litzke.
Frohliger.	Davenport.
Richmond.	Gross.
East.	West.
Keller.	Bartlett.
Keller, Jr.	Elliott.
Lemcke.	Thoms.
Apgar.	Kirby.
Storr.	Carter.
Benjamin.	Leach.
C. M. Peters.	See.
Grubb.	King.
B. B. Tuttle.	Hardy.

IS THERE A GHOST IN AURORA?

The following doggerel was quite popular a number of years ago:

"Once there was a cassowary on the plains of Timbuctoo,
He did eat a missionary, Bible, bones and hymn book too."

On Oct. 30, 1903, the Richards Mfg. Co., Aurora, Ill., manufacturers of door hangers and hardware specialties, absorbed the Richards & Sencenbaugh Mfg. Co. of that town, "bible, bones and hymn book too," after the manner of the illustrious bird mentioned in the little lines above. Having purchased the plant

owned and operated by this company, including all machinery, dies, tools, stock, etc., they moved it into their new building on the main line of the Chicago, Burlington & Quincy R. R., and are now operating this plant. The digestion of the Richards Mfg. Co. being as excellent as that of the cassowary, it stands to reason that this rival firm whose plant was purchased by them have been pretty well absorbed by this time and are *non est,* as it were.

However, we learn from the columns of a contemporary that "The Richards & Sencenbaugh Mfg. Co., Aurora, Ill., have resumed operations with increased capital." Since, as Betsey Prig told Sairey Gamp concerning Mrs. Harris, "there ain't no sich person," this resurrection of this defunct and obliterated concern can only be looked upon as a Fox river valley ghost story.

Perhaps the *genii* of this commercial cadaver is hovering around Aurora somewhere, and is turning out a line of invisible door hangers for use by the uncanny denizens of the spirit world.

PHILADELPHIA HARDWARE DEALERS WILL DINE.

The Hardware Merchants' & Manufacturers' Association of Philadelphia will hold their 18th annual dinner at the Bellevue Hotel, Broad and Walnut streets, that city, Tuesday evening, Jan. 26, at 6:30 p. m.

"NEVER-SLIP" NAIL PULLER.

The Cedar Rapids Mfg. Co., Cedar Rapids, Ia., are manufacturers of the "Never-Slip" nail puller shown in the accompanying cut and designed for work on curved surfaces of barrels, hogsheads, etc., as it overcomes the curved surface, thereby rendering the pulling of nails from the side of the barrel the same operation as pulling nails with the regular form of puller from a flat surface. It enables an operator to draw a nail from the chime of a barrel, or any edged piece of wood, no matter how sharp the edge, providing it is strong enough to withstand the pressure necessary to draw the nail. On flat surfaces, its hook, besides acting positively and never slipping when set, raises the fulcrum point, thereby causing the nail to be pulled straighter, it is claimed.

Never-Slip Nail Puller.

This firm make a full weight three pound rammer, and the iron which is taken out by way of fluting it, is put into the handhold. This rammer is finished in a hard, brilliant aluminum enamel. This firm have incorporated another decided improvement in this rammer by making a double collar at the mouth, one being formed by the anti-pinching lip and the other being placed back in the rammer about one and one-half inches from the lip, thus obtaining a double riding surface for the shank.

MITRE BOX.

Justus A. Traut, New Britain, Conn., has invented a mitre box on which he was allowed a patent Jan. 12. This has been assigned to the Stanley Rule & Level Co., New Britain, Conn., the well-known manufacturers of carpenters' tools of all kinds. It is illustrated in the accompanying cut. This saw guide and carrier for a mitre box comprises guide-posts, a carrier frame mounted to slide up and down thereon, and means carried by this carrier frame for frictionally holding the carrier at any elevation on the supporting posts. A notch in one of the supporting posts is adapted to receive these adjusting means and positively lock the same in its elevated position.

This firm make a very complete line of mechanics' tools of all kinds and would be pleased to forward the trade a catalogue on application. When writing for same kindly add: "Saw it in THE AMERICAN ARTISAN."

AUGER BIT.

The Ford Auger Bit Co., Holyoke, Mass., send us a price list of their patented auger car and machine bits. They carry in stock for immediate shipment a very complete stock of ship augers and ship auger car bits. The steel which they use for all their tools is made by a special formula and is tempered with the best of care. Some of their additions to their line are boring machine augers, ship auger pattern and extension lip pattern. Every Ford auger bit is forged from the best quality of crucible cast steel, under heavy trip hammer blows, which process makes the grain of steel finer and tougher. This firm's special process of forging augers makes them strong and gives a large space for clearance. They call special attention to their ship auger with screw.

Ford auger bits, style of 1903, will bore faster than any other bits which will bore as smooth, it is claimed. If the bit is allowed to bore without any pressure after the screw begins to draw in, it will not silver on leaving the wood. In boring through a piece of wood, do not turn back on the brace, but pull straight back and you will have a perfectly clean hole. Ford auger bits will not drift in boring at a slant of forty-five degrees. On account of their patented concave twist they will never clog. They are the only bits which may be relied upon to bore the end grain of hickory, it is claimed.

Ford ship augers and ship auger car bits, style of 1903, will bore such wood as Washington fir the entire

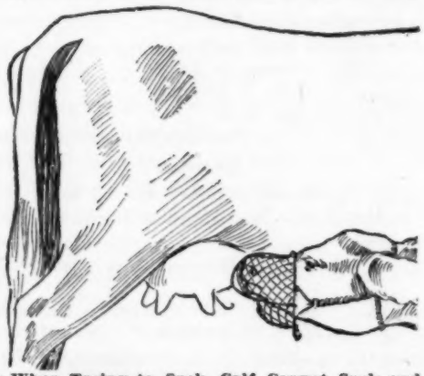
length of the twist and not clog. The Ford augers with screw will never drift in boring at any angle with the grain of the wood. They will draw in without any pressure on the hardest knots or frozen wood.

One of these catalogues will be forwarded the trade on application. When writing for same kindly add: "Saw it in THE AMERICAN ARTISAN."

THE COOLEY COLT, CALF AND COW WEANER.

The Cooley & Randegger Mfg. Co., 103 S. Canal St., Chicago, are manufacturers of the Cooley colt, calf and cow weaner shown herewith. These weaners have no prongs and prevent calves from sucking or hurting their mothers or themselves. They permit the eating of grass, hay or grain on the ground or the drinking of water or milk without trouble. It prevents cows from sucking themselves or other cows and weans colts as well as cows. It is a great horse cribber and prevents vicious horses from biting.

Position When Eating Grass, Hay or Grain on the Ground. Without Trouble.



Position When Trying to Suck—Calf Cannot Suck and Cannot Hurt Its Mother or Itself, As There Are no Prongs, But Can Eat on the Ground or in a Box.

BOLT AND SCREW CASES.

The American Bolt & Screw Case Co., Dayton, O., send us a circular calling attention to their bolt and screw cases. In the construction of these cases this firm are using iron standards, screwed firmly into an iron hub, in the bottom, which makes them perfectly true and solid, it is claimed.

The tops and bottoms are double, with the grain of the wood crossed, glued and screwed together, and braced with iron rods, which bind the whole firmly together, and make it strong enough to bear three times the weight that can be put into them.

Both bolt and screw cases are made of the best seasoned Tennessee poplar, finished in imitation of cherry. The fronts of drawers are made of the best Norway pine, with the sizes they contain nicely printed on, making it at once a most desirable appendage to hardware stores, as they prevent mixing of screws and bolts, thus enabling dealers to keep their stock in good shape. The drawers are all provided with stops to prevent their removal from the case. Each drawer holds a package of bolts or screws of the size and number indicated on the front of the drawer.

This firm have perfected a locking device for their cases. It is so arranged that all the drawers can be locked and unlocked at one time. There is a lever attached to the case on the under side, and it is only accessible to the person behind the counter. By pressing this lever down it unlocks the drawers and engages in a catch, which holds it in this position until it is desired to lock the drawers again, when by a slight touch the lever is disengaged and the drawers are locked again.

When these cases are used for fine tools and other valuable articles they are provided with lock and key, so that only the person having a key has access to the drawers.

One of these circulars will be forwarded the trade on application. When writing for same kindly add: "Saw it in THE AMERICAN ARTISAN."

A MISTAKE CONCERNING CHICAGO DELEGATION.

The East St. Louis Journal of Dec. 28 says: "Yesterday the advance guard of the Illinois Retail Hardware Dealers' Association, consisting of L. D. Nish, secretary, of Elgin; Geo. Scheurer, Vandalia; Geo. R. Lott of Chicago, who comprise the executive committee, were in the city guests of the local hardware dealers. After dinner at the Royal Hotel the local committee consisting of Fred B. Giessing, Charles Mauer, J. W. Gillespy, Wm. Hauss and F. B. Jordan, met the executive committee and made final arrangements for the meeting. Music Hall was selected as the place, Royal Hotel to be headquarters. The committee announce that 500 delegates will be in attendance. The Chicago delegation, consisting of 150 persons, will come on a special train and be quartered at the Royal Hotel. The local committee requests that our people and the business men in general assist by showing the visitors all possible courtesy."

This item is radically in error as regards the Chicago delegation to the convention. Geo. R. Lott authorizes us to state positively that the Chicago delegation will not be quartered at the Royal Hotel, East St. Louis, but that they have a committee looking up headquarters at several St. Louis hotels, and the chances are they will pick on the Laclede. The Chicago contingent will attend the meetings at the Music Hall and return to their St. Louis quarters, and a number of dealers in other sections of the state will doubtlessly make similar arrangements.

Mr. Lott desires this notice in the East St. Louis Journal corrected so that manufacturers would not

make their exhibit there, but rather in the Music Hall, where the convention will be held.

PRIZES FOR ARTISTIC COLORING.

The Wm. Connors Paint Mfg. Co., Troy, N. Y., are getting out a booklet showing black and white outlines of a deer, swallow, well, cow, gate and other objects, which contains an offer of prizes that will be eagerly welcomed by the rising generation. The announcement of these prizes is as follows:

"Prizes will be given to those who return the most artistically colored drawings in this booklet, on or before April 1, 1904.

Rules governing prize drawings:

1st. All drawings must be painted with a wood toothpick, match, chip of wood, small brush or feather.

2d. Use only the colors contained in this book.

3d. No professional will be allowed to compete for prizes.

4th. Every contestant must have his application approved of by an agency for "American Seal Paints," or the principal paint dealer in your town.

Three prizes will be offered—

1st $15.00
2d 10.00
3d 5.00

All books must be returned to the advertising department of The Wm. Connors Paint Mfg. Co., Troy, N. Y."

This booklet will be forwarded dealers on application. When writing for same kindly add: "Saw it in THE AMERICAN ARTISAN."

PROGRAM FOR NORTH DAKOTA MEETING.

C. N. Barnes, Grand Forks, N. D., secretary of the North Dakota Retail Hardware Dealers' Association, advises us that from all indications he believes that association will have a very interesting meeting and a larger attendance than ever before.

All railroads that operate in that state have granted one and a third rates on the certificate plan and the same rate will be granted from all points in Minnesota to Grand Forks, so many people living in the Twin Cities or Duluth who desire to come to the city will have the privilege of securing these rates if they get their certificates when purchasing tickets.

The program is as follows:

WEDNESDAY MORNING SESSION, JAN. 27TH, 10 A. M.

Meeting of Executive Committee.

WEDNESDAY AFTERNOON SESSION, 2 P. M.

Address of Welcome—Mayor Dinnie.
Response, Vice-President, H. F. Emery.
Roll Call of Members.
Enrollment of New Members and payment of dues.
Appointment of Committees.
Nominating, Transportation, Resolutions, Press, Auditing, Grievances, Question Box, etc.
Paper—"Uniform Retail Prices and Fixed Terms of Sale by Retailers," H. J. Hellekson, Fairmount.
Paper—"Efficient Salesmen," W. H. Pinkerton, Lakota.

THURSDAY MORNING SESSION, JAN. 28TH, 9 A. M.

Enrollment of New Members and payment of dues.
Paper—"Our Troubles," G. W. Wolbert, Bismarck.
Paper—"Should the Hardware Jobber Handle Stoves," Geo. L. Nye, Shakopee, Minn.
Paper—"Trials and Tribulations of the Hardware Man," U. S. Conn, Fargo.
Address—"Some Ways in Which the Interests of the Retail and Wholesale Hardware Merchants Can Be Benefited," R. A. Kirk (Ex. Pres. National Hardware Association), St. Paul, Minn.

THURSDAY AFTERNOON SESSION, 2 P. M.

Paper—"Invisible Assets," R. A. Grim, St. Paul, Minn.
Discussion.
Paper—"The Merchant and the Local Editor," W. E. Davis, Minneapolis.
Discussion.
Traveling Men "at the bat."
Paper—"Just a Little Nonsense," H. H. Walther, Casselton.

THURSDAY EVENING SESSION.

The Business men of Grand Forks have provided an entertainment in the Pioneer Club Rooms, to which all Hardware guests are invited.

FRIDAY MORNING SESSION, JAN. 29TH, 9 A. M.

Enrollment of New Members.
Annual Reports of President H. N. Joy.
Annual Report of Secretary C. N. Barnes.
Annual Report of Treasurer W. H. Pinkerton.
Report of Auditing Committee.
Report of Nominating Committee.
Election of Officers.
Reports of other committees.

FRIDAY AFTERNOON SESSION, 2 P. M.

This entire session to be devoted to the discussion of Question Box Topics.

BUSINESS CHANGES.

NEW FIRMS.

Pierceville, Ind.—F. W. Winters.
Oregon, Ill.—C. C. Tyler.
Waynesville, Mo.—M. Long.
Neenah, Wis.—M. A. Dunn.
Dousman, Wis.—Miller Bros.
Vesper, Wis.—G. H. Horn.
Lebanon, Neb.—S. R. Jolly.
Nelson, Neb.—Hodges & Ewing.
Faulkton, S. D.—R. B. Quimby.
Sligo, Pa.—Weeter Bros.
Creekside, Pa.—The Creekside Hardware & Furniture Co.

CHANGES.

Sharon, Pa.—Bennet & Dickey succeed Bennet & Dunn.

Plainview, Neb.—The Vrooman Hardware Co. succeed Baldwin Bros.

Clatonia, Neb.—J. S. Bornheimer is succeeded by C. C. Leng.

Clarendon, Tex.—The Witt-Richardson Hardware & Implement Co., succeed G. C. Hartman.

Salem, Oreg.—Gray Bros. are succeeded by F. W Spencer.

Campbell, Tex.—Roach, Kelly & Co. are succeeded by R. N. Smith.

Pilot Knob, Tex.—The Salmon-Jones Hardware & Grocery Co. succeed J. W. Salmon.

Hardwick, Minn.—W. & R. Heckt have dissolved partnership.

New Market, Minn.—Turek & Wagoner have dissolved partnership.

MISCELLANEOUS.

Hoffman, Minn.—Hubred & Sons; fire loss.
Vermilion, Ohio—George H. Blattner; fire loss.

THE NEW YORK EXTRA.

Newsie—"Extra! Four hundred found dead!"
Rube Comeon—"Where? Where?"
Newsie—"In a graveyard. Extry! Extry!"—Boston Globe.

Heating and Ventilating

It is said that Oliver M. Simmons of Indianapolis, Ind., will shortly erect a plant for the manufacture of heating apparatus at Nashville, Tenn.

The Kellogg-McKay-Cameron Co., Chicago, manufacturers of steam and hot water boilers, were visited by fire on Jan. 8th last. Their loss is estimated at $25,000.

A. J. Desmond is president, H. L. Cram is treasurer and Frederick Hale is clerk of the Florence Co., Portland, Me., capitalized at $50,000 for dealing in heating apparatus.

Fred J. Vaux, Albert J. De Laplanti and Eunice McBarney are the incorporators of Vaux & Co., Buffalo, N. Y., capitalized at $10,000 for steam heating and ventilating.

Thomas E. Hunt, Blue Island, Ill., has just secured a patent on a warm air register which he has assigned to the Quaker Mfg. Co., Chicago Heights, Ill. The features of this new register are a casing with a rear wall, open top and end walls formed of a single piece of sheet metal; a cross-bar extending across the lower front face of this casing, a front frame provided with a recess, into which the front edges of the box or casing are adapted to fit; a grate within the box or casing, and a swinging door adapted to open and close the opening in the front frame; flat springs connecting the door with the upper part of the frame, and a slotted arm pivoted to the door and attached to the grate by a slide for holding the door in adjusted position.

The Lennox Mfg. Co., Marshalltown, Ia., have made arrangements with P. J. Schwie and L. W. Robbins to represent them in their furnace work the coming year; G. T. Strite and A. E. Gunzenhauser will look after their gasolene engine department. E. C. Doughty, with headquarters at Norfolk, Neb., will represent their interests in that state; Farwell, Ozmun, Kirk & Co., St. Paul, Minn., will act as their representatives in Minnesota, North and South Dakota; Garrett & Elliott, Denver, Colo., will look after their interests in Western territory, and J. E. Wampler, Irwin, Pa., will care for their Eastern interests. They will be represented in Kansas by J. W. Hunt, Kansas City, Mo.; in Indiana by F. J. Bailey of Indianapolis; in Illinois by Jones & Son, Streator, and by Fautz & Valentine, Peoria.

THE IMPERIAL HOT AIR BLAST HEATER.

The Canton Foundry & Machine Co., Canton, O., send us a catalogue showing the Imperial hot air blast heater. The lower section of this heater contains the ash pit. The sectional fire pot is easily and cheaply repaired. The cold air blast chamber permits the cold air to be gradually heated as it passes up the sides of the fire pot and then through the holes at top. A damper back of the radiator can be closed after the fire is started, thereby causing the heat to pass entirely around the radiator before going out the smoke pipe, thus preventing the heat from being wasted. The casing is sectional with dividing wrought iron rings bolted on each section preventing expansion from the bearings. One of these catalogues will be forwarded the trade on application. When writing for same kindly add: "Saw it in THE AMERICAN ARTISAN."

AN EXPERIENCED FURNACE SALESMAN.

G. W. Johnston, who looks after the interests of the Bonnot Company, Canton, O., furnace manufacturers, in Missouri, Kansas, Illinois and Iowa, was a recent caller at THE AMERICAN ARTISAN office. Mr. Johnston said: "I have had a long experience in the furnace business. I started in the business with Mr. Wells at Oskaloosa, Ia., who is one of the best posted men on furnaces I know. Mr. Corbin at Tipton, Ia., who is well along in years, being over 60 at present writing, is another man who is thoroughly educated in every phase of furnace construction. Mr. Wells was engaged in the manufacture of furnaces for a number of years at Oskaloosa, Ia., until his foundry burned down. His furnaces were very satisfactory wherever they were introduced, but they were too well made to allow large profits. For instance, there were 1,700 rivets driven into every furnace sold. The only objection that could have been made to these furnaces was that they were of a square type, thus leaving dead corners, which are, of course, absent when round fire pots are used.

"The year 1902 was a phenomenal furnace year, and there is no question but that all leading manufacturers of furnaces did very well. The past year has not been so good, there having been a falling off in building in a number of cities on account of labor troubles. If it were not for the labor cloud on the horizon there could be no question but that 1904 would be an exceptionally prosperous year for the furnace trade, but where unions in the building trades are making threats, men who contemplate putting up buildings are liable to become shy and postpone operations.

"Seventy-five per cent of the furnaces offered the trade waste too much heat up the chimney, because they have too short a smoke travel, and the heat is not extricated from the smoke as it should be. The underfeed furnace needs the best of coal without any dirt in it to secure good results. I believe in the pit system for decarbonized air, although some furnace men take a radically different view and believe this air should be disposed of through the jackets.

Side wall registers have come in quite frequently during the past few years, and the trouble with some makes of these is that they are widely overrated. Their actual capacity is only about three-quarters their rated capacity. Other makes of side wall registers are O. K. as regards rating. One difficulty in regard to this style of registers is found in the scrimping practices which have been inaugurated by so many lumber dealers. There was a time, some years ago, when a 2x4 meant a piece of wood 2 inches in one direction by 4 inches in another. Nowadays when you come to measure them in partitions you find that a 2x4 is 1¾ inches by 3⅝ inches, which gives the furnace man who is about to put in the side wall register so much less room to work with. In order to give the furnace man a good show, 2x6's should be used."

THE U. S. CLINKER HOOK.

The United States Wire Mat Co., Decatur, Ill., are makers of the U. S. clinker hook shown in the accompanying cut. This hook is made of wrought steel with handle grips of wood and the heat will not warp it. The three prongs comprising its mouth are opened wide or shut tightly around the clinker simply by turning the right handle grip, which is the upper end of the inner shaft, the third prong being the lower end of same. The prongs are sharp and never allow the

The U. S. Clinker Hook at Work.

clinker to slip until it is released by the hand again opening them.

This hook saves coal, as a turn of the wrist closes it tight around the clinker, which is lifted out without the least trouble, neither hands nor sleeves touching the furnace door.

WILL MOVE THEIR HEADQUARTERS.

The American Radiator Company expect to remove their general offices and Chicago branch about May 1 to the new office building now under construction at Nos. 284 and 285 Michigan avenue, that city. The building is to be four stories high, occupying a space 52x165 on the west side of the avenue, and about opposite the Logan monument. This building is being erected for the company and will be occupied exclusively for their general offices and salesroom of the Chicago branch.

FIRE POT.

The Boynton Furnace Co., 147-149 Lake street, Chicago, and 207-209 Water street, New York, have been assigned the patent issued Jan. 12, 1904, to George G. Kniffin, Bayonne, N. J., on the fire pot shown in the accompanying cut. This fire pot is circular on the outside and converges to form a rectangular bottom opening. The fire pot is entirely closed except at top and bottom. Its sides are tapering and it is corrugated.

Fire Pot.

MEETING OF IOWA INSURANCE ASSOCIATION.

The annual meeting of the Iowa Hardware Dealers' Mutual Insurance Association was held at Mason City, Ia., on Friday, Jan. 8, 1904.

The board, composed of one member from each congressional district in the state, were nearly all present at this meeting, as well as a representation of the policy holders of the association.

The president and secretary presented their reports of the work of the association from its inception to the present time.

Since the date of the organization of the association about $200,000 of insurance has been placed upon the books. The financial affairs of the association are in a prosperous condition.

Some modifications of the articles of incorporation and by-laws were proposed and adopted. It was decided by the meeting that hereafter all regular hardware dealers carrying agricultural implements, furniture, undertaking goods, harness, wagons, buggies and other goods and wares not more hazardous might be included in the same policy with the regular hardware stocks.

The following is a list of the board of directors elected at this meeting: Jacob Seither, Keokuk; J. F. Doty, West Liberty; L. Lindenberg, Dubuque; S. R. Miles, Mason City; C. F. Schmidt, Marshalltown; Paul De Vol, Jr., Council Bluffs; C. S. Barger, Albia; L. H. Kurtz, Des Moines; C. R. Keating, Mt. Ayr; L. A. Gnam, Carroll; C. E. Haas, Le Mars.

This meeting of the association was adjourned to meet at Des Moines, Ia., at 9 a. m., Feb. 11, 1904.

At a meeting of the board of directors following the adjournment of the association the following officers were elected for the ensuing year: S. R. Miles, Mason City, president; L. Lindenberg, Dubuque, vice-president; L. R. Bailey, Mason City, treasurer; A. R. Sale, Mason City, secretary. Members of the executive committee: C. E. Haas, Le Mars; L. Lindenberg, Dubuque; S. R. Miles, Mason City, ex-officio.

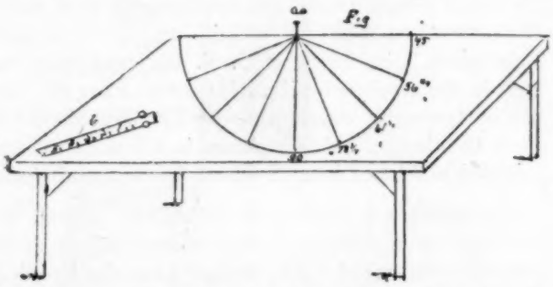
The new board at once took up the subject of the coming year's business. Plans were formulated and adopted which will doubtless put the Iowa association in the front ranks of the hardware mutual fire insurance associations.

The directors will hold another meeting during the session of the Iowa Retail Hardware Dealers' Association to be held in Des Moines, Feb. 10, 11 and 12.

Tinshop

DIAGRAM FOR PATTERN CUTTING TABLE.

Herewith is diagram of a table used for pattern cutting: The outline of Fig. 1 represents the table, which may be of any dimensions required. The semi-circle may be described to suit the convenience of the workman and may be devided into degrees or parts of degrees as shown in diagram, but the semi-circle should extend nearly full width of the table so that the number of degrees may be outside of the sheet, which it is designed to lay off. B is a rule, which should be numbered the same as pocket rule, as shown



in diagram lying on the table. The said rule must have an eyelet on each side at one end, and so arranged that the edge of the rule will be in or even with the center of each eyelet, in order that when the rule is to be used in marking work the lines will be true from center at a (Fig. 1) to circumference of semi-circle A. Fig. 1 is a pin inserted at the edge of the table and in center of semi-circle, over which the rule B is placed when wanted to do work.

$50 FOR SOME LUCKY TINNER.

Some tinners can step right down to the bank and draw not only one fifty-dollar bill but even three or four of them. Some tinners once owned such a bill, but it slipped away from them. Some tinners never saw a fifty that belonged to them. Whichever class you belong to we know you will be glad, Mr. Reader, to secure such a bill in exchange for a good idea on the construction of new tools.

The people who will give this to some lucky tinner are the Niagara Stamping & Tool Co., Buffalo, N. Y. This firm, realizing that the users of sheet metal makers' tools know what changes should be made in these tools, offer six prizes, open to any and all sheet metal workers, for the best suggestions on new tools that will be useful in metal working shops, or on desirable improvements in existing tools. The first prize is $50 cash; the second prize, one 30-inch Excelsior squaring shears; the third prize, one 30-inch Keystone bar holder; the fourth prize, one No. 2 Waugh's circle shears, and the fifth and sixth prizes will consist of six medium sized Buffalo or Niagara snips. It is not necessary that the participants in the competition should construct the tools or improvements that they suggest, a clear explanation of their object being all that is required. Communications will be received until April 30, and the prizes will be awarded May 1, 1904, by a committee, consisting of the superintendent of the company's works and two practical tinsmiths. The names of the prize winners will be published in THE AMERICAN ARTISAN about June 1.

NOTES AND QUERIES.

ROPE.

From Lyman Wood Mfg. Co., Racine Junction, Wis.

Would like the addresses of rope manufacturers?

Ans.—Kentucky River Mills, Frankfort, Ky.; Thomas Carlin's Sons, Allegheny, Pa.; Columbia Cordage Co., Auburn, N. Y.; Galveston Rope Co., Galveston, Tex.; Thos. Jackson & Son, Reading, Pa.; R. A. Kelly Co., Xenia, O.; Lawrence Cordage Works, 46 South street, New York; A. Leschen & Sons Rope Co., 920 North Main street, St. Louis, Mo.; New Bedford Cordage Co., New Bedford, Mass.; Plymouth Cordage Co., Plymouth, Mass.; Schlichter Jute Cordage Co., 21 North Front street, Philadelphia, Pa.; Standard Rope & Twine Co., 287 Broadway, New York, N. Y.; Tubbs Cordage Co., San Francisco, Cal.; Columbia Cordage Co., Auburn, N. Y.

GASOLENE-HEATED SAD IRONS.

From Whipple & Co., Boswell, Ind.

Would like the address of a firm manufacturing gasolene sad irons?

Ans.—Champion Steel Range Co., Cleveland, O.

REPAIRING AGATE WARE.

From "Subscriber," ——, Ill.

I have in my possession a few agate tea kettles and sauce pans, which leak at the seams. These articles have never been used and are of a good make. I have received credit for them. But as the manufacturer has not called for them I hope you may know of a substance to repair them with using a blow torch.

Ans.—A solder made of gold (750 fineness) 32 parts; silver 9 parts and copper 3 parts; or fine silver 19, copper 1, brass 10 and zinc 5 parts, or fine silver 66.7, copper 23.3 and brass 10 parts would probably answer your purpose. Perhaps some of our readers know a good receipt. Surely where a hardware dealer can turn a batch of goods into "velvet" by the use of the right solder it would be a shame if he could not secure it.

PATENT ATTORNEY.

From the Bruegger Mercantile Co., Culbertson, Mont.

Would like the name of a reliable patent attorney?

Ans.—Hubert E. Peck, 623 F street N. W., Washington, D. C.

CAST IRON MOLDS FOR MANUFACTURE OF CEMENT SIDEWALK TILING.

From C. L. Parkin, Goodhue, Minn.

Where can I buy cast iron molds for forms suitable for the manufacture of cement sidewalk tiling?

Ans.—The Portland Stone Co., 95½ East Fourth street, St. Paul, Minn., handle molds for the manufacture of cement sidewalk tiles in two sizes, 18 and 24 inches square.

PRESERVATION OF WOOD STOCK.

From C. L. Parkin, Goodhue, Minn.

How can you keep and treat wood stock, such as maple and hickory, to prevent its perforation by worms?

Ans.—Creosote stains are used on boxes, etc., sent to South America to preserve them from perforation

by insects and by rotting. They can be obtained from Samuel Cabot, 28 Dearborn avenue, Chicago, Ill.

ITEMS.

The Quincy Enameling Works, Quincy, Ill., expect to begin business about Feb. 15.

Burks & Garrett, Mexico, Mo., tinners, have dissolved partnership, Mr. Garrett continuing.

The Missouri Can Co., the successors of the Hunt Stamping Co., Kansas City, Mo., were visited by fire on Jan. 6th last.

The Baltimore Enameling & Novelty Co., Baltimore, Md., have given out the contract for a number of additions to their works at Locust Point, Md.

The Canton Steel Roofing Co., Canton, Ohio, have made arrangements to increase their capacity for the manufacture of their metal ceilings during 1904.

M. T. Horr, L. Denton, A. Sewenthai, H. J. Caldwell and A. Tame are the incorporators of the Cleveland Cream Separator Co., Cleveland, O., capitalized at $50,000.

C. W. Bray has been appointed chief engineer of the American Sheet & Tin Plate Co. He formerly occupied a similar position with the American Tin Plate Co. Sumner B. Ely will be his assistant.

The Edwards Mfg. Co., 100-110 Sycamore St., Cincinnati, O., send us a circular describing the Edwards vested stove pipe, made in all sizes and packed in 25 joints in a wooden crate. This pipe is simple, easy and satisfactory and saves freight, temper, time and money.

The Consolidated Press & Tool Co., 99-101 North Clinton St., Chicago, Ill., are manufacturers of a complete line of can making machinery, sheet metal tools and special machinery. They have brought out a new line of inclinable open back presses, of which they carry five sizes in stock, ready for immediate shipment.

Follansbee Brothers Co., Pittsburgh, Pa., are carrying large stocks of One Pass cold rolled soft pipe sheets, Wellsville polished, Wood's refined iron and Wood's patent planished iron on hand. They are manufacturers of Follansbee pure iron, Old Style roofing plates, Scott's extra coated plates, of which they always carry a large stock on hand, ready for prompt delivery.

W. J. and M. J. McMartin, who are identified with the Duluth Corrugating & Roofing Co., Duluth, Minn., are interested in the Winnipeg Ceiling & Roofing Co., Winnipeg, Manitoba, capitalized at $50,000.

This company are putting up a two-story building 50x200 feet in dimensions, and will manufacture corrugated roofing, steel siding, brick siding, stone siding and metal ceilings, eave trough, cornices, skylights, etc., for the western Canadian trade. They expect to be doing business by April 15th.

The Lafayette Stamping & Enameling Co., West Lafayette, O., advise us that their factory is complete and will be in operation by Feb. 1. They have a main brick building 250x150 feet in dimensions, also a pickling room, chemical room and boiler room. Carl H. Zeuerman, who is an experienced enameler, will look after their enameling work, which will include kitchenware specialties and job work in enameling for the trade.

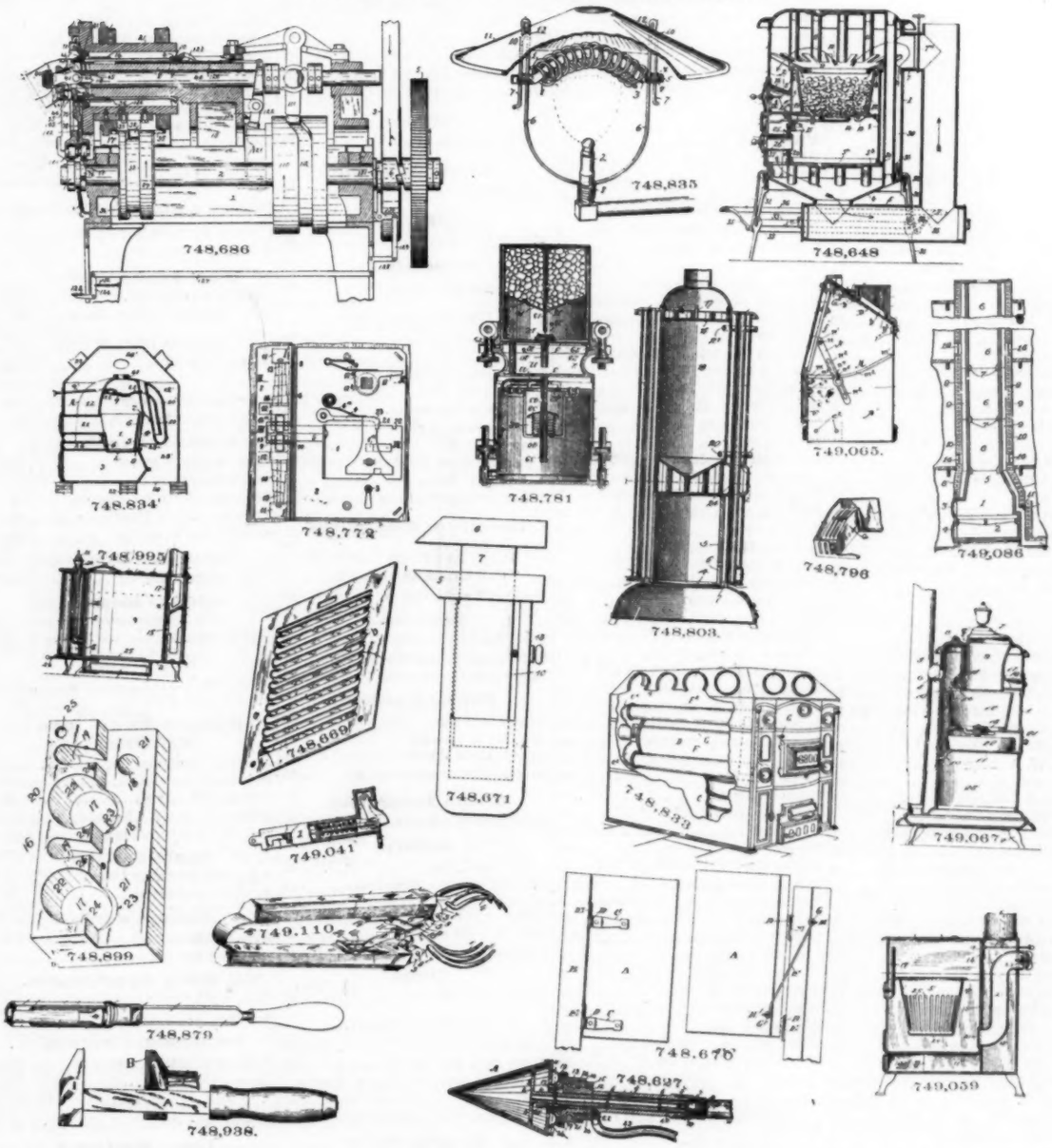
The Garry Iron & Steel Co., Cleveland, O., advise us that they are making a price of 75 per cent off on the Ferdinand Dielman galvanized conductor elbows in 2, 3 and 4-inch plain, round or round corrugated sizes in 12 dozen lots for immediate acceptance, subject to withdrawal at any time. They are also making extremely low prices on eave trough, conductor pipe, roofing, tin plate, solder, etc.

The Berger Mfg. Co., Canton, O., are offering the trade a complete line of metal ceilings in classified designs, sheet metal roofing and siding, eaves trough, conductor pipe, cornices, and architectural sheet metal work, tin plate, sheet iron, metals, etc. Their tin plate department is in charge of S. Y. Buckman, who has been in the tin plate business for over a score of years and is thoroughly conversant with all the needs of the trade in this line. Mr. Buckman is a man of marked geniality and has a host of friends in the metal world.

The Kanneberg Roofing & Ceiling Co., Canton, O., are large manufacturers of stamped steel ceiling, architectural sheet, metal work, skylights, cornice, cresting, finials, roof gutters, conductor pipe, eave trough, elbows, imitation rock faced stone and brick, weatherboarding, all styles of painted and galvanized iron roofing, siding, etc. Their metal ceilings are made from sheet steel, stamped with the heaviest form of presses, and the designs are clearly and sharply defined in the metal so that when decorated every line of the design is displayed to advantage. Their complete classified designs secure an artistic harmonious effect that makes the selection of a ceiling or a side wall an easy matter. Their Cushman metallic shingle is waterproof and fireproof, cheap and durable. It is made of galvanized iron, copper, painted tin and Bessemer steel or iron painted. This firm would be pleased to send their printed matter to dealers on application. When writing for same kindly add: "Saw it in THE AMERICAN ARTISAN."

The Badger Steel Roofing & Corrugating Co., La Crosse, Wis., advise us that their equipment is first class and they are in a position to make shipments on receipt of order. Their line includes ornamental steel ceilings, eave trough hangers, brick and stone siding, roof tinning papers, cornices, skylights and finials, mitres and ends, elbows, conductor hooks, cut offs, galvanized tanks, ridge roll, etc. Their "Badger" pressed standing seam steel roofing and siding is made in sheets of 5, 6, 7, 8, 8½, 9 and 10-foot lengths. Its covering width is 24 inches and it can be laid over sheathing or lath placed a few inches apart or over old shingles. The "Badger" self-capping steel roofing comes in rolls 50 feet long and 26½ inches wide. One roll covers 100 square feet. The "Badger" roll and cap roofing comes in rolls 50 feet long and 24 inches in covering width. The distinctive feature of this roofing is the locking of the cleats into the cap, which holds it firmly to the standing seam. This firm would be pleased to send their trade literature to interested dealers on application. When writing for same kindly add: "Saw it in THE AMERICAN ARTISAN."

NEW PATENTS.



748,938—Monkey-Wrench. Nelson D. Fairchild, Olean, N. Y.

749,065—Warm-Air Register. Thomas E. Hunt, Blue Island, Ill.

748,833—Furnace. Charles J. Andrus, Cincinnati, Ohio.

748,834—Warm-Air Furnace. Oliver L. Badger, Wheeling, W. Va.

748,835—Heater. Caesar R. Bannihr, New York, N. Y.

748,803—Heating-Stove. Jerome T. Smith, Scotland, S. D.

749,086—Heating Apparatus. John C. Nace, Johnetta, Pa.

748,669—Face-Plate for Registers. Harry J. Valentine, Cleveland, Ohio.

748,670—Gage-hinge. John H. Vandever, Olalla, Ore.

749,041—Window-lock. Wladislaw Dzink, Duquesne, Pa.

748,671—Wrench. Alfred L. Vinyard, Slidell, La.

749,067—Magazine-stove. George E. Kendall and William L. Cowdin, Delphi, Ind.

748,781—Acetylene-Gas Generator. William D. Packard, Warren, Ohio.

749,110—Household Tongs. John H. Spangler, Crafton, Pa.

748,772—Lock. Ernest Mühlinghaus, Mettmann, Germany.

748,995—Heating-Stove. Nathan R. Spaulding, Monroeville, Ind.

748,627—Revolving Sad-Iron. Albert D. Mahony, Troy, N. Y.

749,059—Stove. Christian D. Helwig, Kansas City, Kans., and Wilfred W. Montague, San Francisco, Cal.

748,796—Stove. Charles Schweizer, Maplewood, Mass.

748,648—Stove. Frank J. Pioch, Creston, Iowa.

748,899—Hot-Water Heater for Kitchen-Ranges. Paul H. Werner, Newark, N. J.

748,879—Screw-Driver. George E. B. Parkin, Toronto, Canada.

748,686—Pipe-Elbow Machine. John Baeumle, Milwaukee, Wis.

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STRICTLY BUSINESS.

"No, sir," remarked a Philadelphian the other day who supplies the government with necessities of life, "you can't do business with Uncle Samuel in the spirit of a contract; you simply must obey its letter. If you put in specifications amounting to 'steen dollars and twenty-one cents, and then bill it goods under the contract and the total amounts to the same 'steen dollars and 19 cents, you've got to take it back and make up the other two cents, or you don't do business.

"Let me give you an instance of Uncle Samuel's character of exactness. We were awarded a contract for 1,000 feet of copper wire for League Island. We sent the order to the manufacturers, and they turned in the stuff. In a few days we got a letter from the island authorities that that wire is only 985 feet long.

"We answered that we knew it; that the copper ingot did not yield any more, and that we have charged them only for 985 feet. Would that do? Not on your tintype.

"They sent us word that if the wire was not brought up to 1,000 feet the lot would be rejected. Then we had to get a permit from the L. A. to send a man down to join on enough to make the demand good, and he went down and did the work.

"In a few days we were notified that the piece he put on made the whole length 1,004 feet. We wrote back that we didn't care for the four feet and Uncle Sam could have it.

"Next morning up comes an order to cut off that four feet or the whole bunch would be rejected. Then we had to get another permit for our man to go down and lop it off, which he did.

"Was it all plain sailing then? I should say not. When he threw the offending excess upon the ground the guard said:

" 'Pick that up; it's against the rules.'

"He picked it up and was about to toss it into the river, when he was stopped in a mandatory way:

" 'Here! You do that and you'll get yourself into trouble!'

"So, thinking he'd find a resting place outside of government preserves, our employe walked to the gate, where he found a sentinel.

" 'What have you got there?'

" 'A piece of wire.'

" 'You can't carry it out without a permit.'

" 'All right. I don't want to,' and cast it down.

" 'You pick that up,' said the sentinel. 'You can't throw things around here.'

" 'But I don't want the d——d thing.'

" 'Go back and get a permit!'

"And he really had to do it to get that four feet of wire outside of Uncle Sam's fence. Now, wouldn't that make you tired?"—New York Commercial.

Trade Report.

CHICAGO IRON MARKET.

Now that we are fairly launched into the New Year changes of one nature or the other hoped for or expected have not materialized.

The conservatism which marked the transactions of the latter part of last year continues to be the leading factor.

The rapid decline of pig iron and its slow recovery has been devoid of any signal disaster in a financial way to buyers or sellers as purchases have been made with extraordinary care.

Buyers have erred rather in the direction of an under-supply than over-supply of raw materials and were thus able quite generally to keep even with the market.

The Southern situation seems to be firmer than for some time past.

No. 2 Foundry at $10.00 f. o. b. cars Birmingham is being held as the minimum price by leading sellers.

Some sales have been made on that basis.

Belief is expressed, however, in some quarters that this basis cannot be maintained.

During the past week transactions in Northern iron have been greater in number and the tonnage larger than for Southern brands.

The majority of these orders, however, are for future delivery the actual tonnage moving being below the average.

This is partly accounted for by many consumers taking inventory at this time of the year.

The outlook is not dark by any means as production is being decreased and consumption is likely to show an increase on account of new contracts coming into force at the beginning of the year.

IRON AND STEEL.

There are reports of cuts on steel ingots and billets, and also on plates and structural material. There is keen competition in sheets, and prices of black sheets are reported to have been cut from 5 cents to 10 cents under the official price while galvanized sheets are said to have been sold at a discount of 80 and 2½ per cent. Business in bars has been confined to small orders for quick shipment. While there has been a fairly good inquiry for basic and foundry iron, the actual contracts closed foot up a very moderate tonnage. The inquiries for foundry grades are mainly for guaranteed analysis, the iron being wanted for special castings. Northern furnaces have been more inclined to sell foundry iron at concessions, but the volume of business has been small.

SHEETS.

Trade in black sheets is quiet, transactions being limited to small lots. There is, however, an improved demand for galvanized material. The following quotations on black sheets can be shaded on desirable business. We quote Chicago prices on carload lots, mill shipments: No. 27 gauge black, 2.41½c to 2.46½c; No. 28, 2.46½c to 2.51½c; galvanized from mill, 80 and 2½ per cent off. Store prices are without essential change, and we quote as follows: No. 16, 2.45c; Nos. 18 and 20, 2.55c; Nos. 22 and 24, 2.60; No. 26, 2.70c; No. 27, 2.80c; No. 28, 2.90c; galvanized from store, 75 and 7½ per cent.

BILLETS AND WIRE RODS.

Trading in both products has been limited to small orders, the tonnage for the week being of small proportions. We quote wire rods, Chicago delivery, $32 to $33; open hearth and Bessemer billets, $24 Chicago, whether for rerolling or forging.

STRUCTURAL STEEL.

Specifications continue to keep up to their past proportions, but the total volume of new business is not of any consequence. There is, however, a large tonnage being figured on, a considerable portion of which will be placed when spring is nearer at hand. Prices are without change, and we quote mill shipments, Chicago delivery, as follows: Beams and channels, 16 inches and under, 1.76½c; 18 inches and over, 1.86½c; universal plates, 1.76½c; angles, 3x3 and larger, 1.76½c; tees, 3x3 and larger, 1.81½c; zees, 1.76½c. On lots from store, we quote beams, channels and angles, 3x3 and larger, 1.90c rates; 18, 20 and 24-inch, 10c extra; tees, 1.95c rates.

WIRE NAILS.

As was to be expected and as has been prophesied for the past two or three weeks, the American Steel and Wire Co. has advanced its prices on all wire products, including wire nails, barb wire and smooth fence wire. The advance is $1 per ton beyond former quotations. This represents an increase of 5 cents per 100 pounds and 5 cents per keg on wire nails.

The advance will not come as a surprise to anyone. Orders for wire nails have been pretty heavy ever since the decline of last month, and many dealers have laid in heavy supplies. Heavy tonnage has been booked for the past three weeks and stock has fallen low in the manufacturing houses, while it was found to be impossible to greatly replenish this deficit during December.

Supply houses have sent out warnings advising dealers to send in orders as soon as convenient, fearing a shortage for spring delivery.

Manufacturers outside of the wire and wire nail departments are making a similar advance, and this concerted action may have helped to impel the American Steel and Wire Co. to raise its prices. We quote carload lots to jobbers, $2.05 per 100 pounds, Chicago; less than carload lots, $2.15; car lots to retailers, $2.10, all f. o. b. Chicago.

CUT NAILS.

At the meeting of the Cut Nail Association, held on

January 7, the price was reduced $4 per ton or 20c per keg below all former quotations in any way official.

It will hardly be possible for manufacturers to cling to this reduced price for any long period, and there is a general feeling that the price will be advanced within a short time, perhaps when the next meeting is called. The association agreed on a price of $1.75 per 100 pounds, base, in car lots, to the retailer, which, with the freight added to Chicago, makes the price on cut nails $1.91½. The Chicago Steel Mfg. Company, whose mill was burned, announce that they have made arrangements with other mills by which they will take care of all orders, and that they will rebuild their plant with all speed.

BARB WIRE.

A very large tonnage was responsible for an advance of $1 per ton above former official quotations in this market.

There is shortage of supply amongst manufacturers.

The price to jobbers in car lots is $2.35, Chicago, for painted, and $2.65 for galvanized. Retailers buy their wire at 5 cents per 100 pounds higher than this price in car lots and 15 cents higher in less than car lots. Staples have been advanced to $2.20, Chicago, for plain and $2.60 for galvanized to jobbers, with 5 cents advance to retailers.

SMOOTH FENCE WIRE.

The demand has been quite heavy and many rather large contracts have been placed. The price was advanced January 11 by the largest manufacturers $1 a ton above former official quotations, making the price of base sizes Nos. 6 to 9 $1.95 per 100 pounds in car lots to jobbers, f. o. b. Chicago, and $2.05 in less than car lots. The extra of 30 cents for galvanized continues on Nos. 6 to 14, with 60 cents extra on Nos. 15 and 16.

CORDAGE.

Prices hold well. The demand for Manila and sisal rope is small, while that for special brands is much more active.

Quotations on the basis of 7-16 inch diameter and larger are as follows: Pure Manila, 11½ cents; second grade Manila, ½ to 1 cent per pound lower; pure sisal, 9¼ cents; mixed sisal, 8¼ cents per pound. These quotations are subject to a rebate of ¼ cent per pound to carload buyers.

LINSEED OIL.

A general paralysis of this market has resulted from the high prices.

The large buyers are waiting for the crushers to reduce quotations while the crushers, who are said to have bought large supplies of seed, are waiting for the buyers to be forced to pay the prices demanded.

The buyers will probably be able to hold off for ten weeks or two months, and the question really is whether the crushers will keep to the present or higher prices for that length of time.

The only demand is for small lots.

Quotations are as follows: City raw, in lots of five barrels or more, 37 cents; in lots of less than five barrels, 38 cents per gallon. Out of town and western oil, 35 to 36 cents per gallon.

COPPER.

The official price on copper has been advanced to 12¾@13c for lake; electrolytic, 12⅝@12⅞c; casting, 12½@12¾c. The London closing was cabled easy: Standard copper, spot, £58 5s; futures, £57 12s.

The Copper Manufacturers' Association quotes manufactured copper on a basis of 18c per lb for sheets and bars. Yellow sheathing material is quoted on a basis of 15c.

TIN.

Pig tin is somewhat easier, spot being off ⅛c in New York Jan. 14, the new quotation being 29⅛@29½c for spot and January. The jobbing price is steady at 30@31c. The closing in London was cabled easy at £132 17s 6d for spot and for futures.

TIN PLATES.

Tin plates are steady and unchanged at jobbing prices: Melyn, $6.50@7; Alloway, $5.75@6.25; coke, $4.87½@6.50; ternes, $5.25@8; additional X, $1.50@1.75 more.

LEAD.

The Smelters' Association has withdrawn all prices on pig lead until Feb. 10. Spot lots of lead are held at 4.45c in New York. The jobbing quotation is steady at 4¾@5c, according to quantity. The London quotation is £11 8s 9d. St. Louis is firm at 4.17½@4.20c. Manufactured lead is unchanged at: Lead pipe, 6¼c; sheet, 7c; tin pipe, 45c; tin-lined pipe, 12½c; old lead in exchange, 3¾c; tea lead, 3¼c.

SPELTER.

Spelter is firm at: Round lots, New York, 5@5.10c for spot and January; jobbing, 5½@6½c; sheet zinc, cask lots, 6½@7c; small lots, 7½@8c; St. Louis is firm at 4.75c; London, £21 17s 6d.

ANTIMONY.

Antimony is quiet at: Round lots, New York, Cookson's, 7c; Hallett's, 6¼c; United States Star, 6¼c; Italian, French and Japanese, 5¾@6c.

NICKEL.

Nickel is steady at 40@47c for large lots, and 50@60c for small lots.

PLATINUM.

Platinum is steady at $19 per oz for large lots in New York.

QUICKSILVER.

Quicksilver is lower at: New York, $46 per flask for large lots; small orders higher; San Francisco is quiet at $44@45, domestic orders; for export, $41.50@42; London, £8 5s.

Current Hardware and Metal Prices.

THE AMERICAN ARTISAN AND HARDWARE RECORD is the only publication containing western hardware and metal prices corrected weekly.

METALS.

FIRST QUALITY BRIGHT PLATES.

		Per Box.
IC	14x14	$10 25
IC	14x20	7 25
IX	14x20	8 40
IXX	14x20	9 60
IXXX	14x20	11 60
IXXXX	14x20	12 85
IC	20x28	14 25
IX	20x28	16 55
IXX	20x28	18 95
IXXX	20x28	21 50
XXXX	20x28	23 85

COKE PLATES.

Cokes, 180 lbs	IC	20x28	8 85
Cokes, 200 lbs	IC	20x28	9 05
Cokes, 216 lbs	IC	20x28	9 45
Cokes, 216 lbs	IX	20x28	11 65

PIG IRON.

Lake Sup. Charcoal	$16 50@$17 50
Local Coke Fdy No. 1	15 00@ 15 00
Local Coke Fdy No. 2	14 00@ 15 00
Local Coke Fdy No. 3	14 00@ 14 50
Local Scotch Fdy No. 1	15 50@ 16 00
Ohio Strong Softeners, No. 1	16 80@ 17 30
Southern Silvery	15 35@ 16 35
Southern Coke No. 1	13 35@ 13 85
Southern Coke No. 2	12 85@ 13 35
Southern Coke No. 3	12 35@ 12 85
Southern Coke No. 4	11 80@ 12 35
Southern No. 1 Soft	14 85@ 15 35
Southern No. 2 Soft	14 35@ 15 10
Alabama Car Wheel	19 85@ 20 85
Malleable Bessemer	14 75@ 15 25
Jackson Co. Silvery	18 30@ 20 85

BLACK SHEET STEEL.

No. 16	per 100 lbs.	$2 55
No. 18-20	per 100 lbs.	2 60
No. 22-24	per 100 lbs.	2 65
No. 25-26	per 100 lbs.	2 70
No. 27	per 100 lbs.	2 75
No. 28	per 100 lbs.	2 85
No. 29	per 100 lbs.	3 15

SMOOTH STEEL.

Wood's Smooth	No. 15-17	2 85
" "	No. 18	2 95
" "	No. 20	2 95
" "	No. 22-24	2 85
" "	No. 25-26	3 05
" "	No. 27	3 15
" "	No. 28	3 25

PATENT PLANISHED SHEET STEEL.

Patent Planished Sheet Steel. ....."A" $10 20, "B" $9 20

GALVANIZED IRON

F.O.B. Chicago 75%

HOOP IRON.

¾x20	¾x20	⅞x20
$2 95 100lbs.	$2 85 100lbs.	$2 75 100lbs.
1x20	1¼x19	1½x19
$2 65 100lbs.	$2 60 100lbs.	$2 50 100lbs.

PAINTED CORRUGATED IRON.

8 x 2½ feet Sheets. 28 gage, per 100 lbs. $2 60

SOLDER.

XXX Guaranteed ½&½, per lb. 19¾c
Commercial ½&½ ....per lb. 18¾c
No. 1 Plumbers .... 16 c

SHEET ZINC.

600 lb. Casks ....base, per cwt. $5.90
200 lb. Casks ....per cwt. 6.10
Sheets ....per cwt. 6.15

COPPER.

Copper ....base, 22c

TIN PIGS AND BARS.

Banca, pigs, per lb ....35@35½c
Straits pigs, per lb 35c
Straits in bars, per lb 37c

LEAD.

American Pig ....$4 60@4 62½c
Bar 6¾
National (White) brands (in less than 100 lb. lots) per lb 7¾

HARDWARE.

ADZES.

Carpenters'.
Ajax 50%
Blood's ....40&5%
Hunt's 25%
White's 12½%

Coopers'.
Barton's 20%
White's 15%

Ship.
Ajax 50%
Blood's ....40&5%
Hunt's 25%
White's 12½%

AMMUNITION.

Caps, Percussion—per 1,000.
F L Waterproof, 1-10s 40c
G D 35c
Eley's 52c

Cartridges.
Peters Rim Fire Ctgs ....50&3%
Peters Cent Fire, Pistol & Rifle 25&3%
Peters Cent Fire, Military and Sporting Ctgs ....15&8%
Peters Blank Ctgs, except 22 and 32, an additional 10% from above discount.
Peters Blank Ctgs. 22 cal. $1 18
Peters Blank Ctgs. 32 cal., C. F.. 4 40
Peters B B Caps, Round ball $1 44
Peters B B Caps, Conical ball $1 85
U. M. C. Rim Fire Ctgs ....50&3%
U. M. C. Cent. Fire, Pistol & Rifle 25&3%
Winchester Cent. Fire, Military and Sporting Ctgs ....15&8%
U. M. C. B B Caps, Round Ball ....$1 75..18%
U. M. C. B B Caps, Con. Ball. $1 85 net
U. M. C. Rim Fire Shot Ctgs. 50&15&3%
U. M. C. Cent. " " 25&15&3%

Primers.
Berdan Primers $1 00
Peters Primers 1 20
U. M. C. Primers 1 20
Winchester Primers 1 20

Shells.
Peters Empty Paper Shells, 10 and 12 gauge. League ....25&2%
Peters Empty Paper Shells, 16 gauge. League ....30&2%
Peters New Victor Nitro Shls. 30&2%
Ideal ....25&7%
Peters Loaded Shells. League and Referee Semi-Smokeless. 40&1%
Peters New Victor Loaded Shells with King's Smokeless ....40&5%
Ideals Loaded with King's Smokeless ....40&10&10&1%
U. M. C. New Club, 16 gauge ....30&2%
U. M. C. New Club ....25&2%
U. M. C. Nitro ....20&2%
U. M. C. High Base ....20&2%
Winchester Blue Rivals .... } 40&1%
Winchester Yellow Rivals ... }
Winchester Repeater ....20&2%
Winchester Leader ....40&5%
U. M. C. Loaded Shells, Black Powder .... } 40&1% full cases
Winchester Loaded Shells, Black Powder .... }
U. M. C. .... } Smokeless 40&10&10&1% full cases
Winchester .... }

Gun Wads—per 1,000.
Peters Gun Wads 18%
U. M. C. Gun Wads 18%

Powder. Each
King's Smokeless, kegs $11 30
" " ½ kegs 5 80
" " ¼ kegs 2 97
" " 1-lb. cans 51
" " 1-lb. " rifle 70
Dupont's " 50-lb. drum.. 22 45
" " 25-lb. kegs.. 11 30
" " 12½-lb. kegs. 5 80
" " 6¼-lb. kegs.. 2 97
" " 1-lb. cans.... 51

Shot.
Dropshot, sizes smaller than B, 25-lb. bags, per bag $1 60
Drop shot, B and larger sizes, 25-lb. bags, per bag 1 85
Buck Shot, 25-lb. bags, per bag.. 1 85
Chilled Shot, 25-lb. bags, per bag. 1 85

ANVILS.

Trenton, 70 to 80 lbs ....9¾c per lb
Trenton, 81 to 150 lbs ....9c per lb

AUGERS.

Boring Machine ....60&10&5%
Carpenters' Nut ....60&10&5%
Hollow: Ives' New Pattern 25%
Bonney's—list $30.00 ....55&10%
Stearn's, No. 1 ....doz. $42 00
Stearn's, No. 3 .... " 33 60
Post Hole.
Dalbey, 8-inch ....per doz. $ 5 75
Digwell, 8-inch .... " 13 00
Howe's, 6 and 8-inch.. " 12 50
Iwan's Improved ....40 & 5%
Vaughan's, 4 to 9-inch per doz. 6 50
Rafting.
Snell's ....50&5%
Ship.
Ford's, with or without screw, 40-5%
Snell's, " " " 40-5%

AWLS.

Brad, handled ....per doz. $0 28
shouldered, ass'd, 1 to 4 ....per gr. 95
patent, asst'd, 1 to 4 " 90
Harness, common .... " 1 10
patent .... " 90
Peg, shouldered .... " 95
patent .... " 40
Scratch, No. 2, handled .... " 4 40
No. 1, socket handled ....per doz, 1 15
No. 20 Hurwood " 2 00
Sewing, common ....per gr. 90
patent .... " 90

AXES.

Boys', Handled:
Camp Fire, 3-lb., per doz $5 75
" " 4-lb., freighters', per doz 6 75
Cast Steel, good grade, pr. dz., 5 50
Pioneer, per doz 6 75
Broad:
Peerless 50%
Red Warrior, per doz $22 00
Firemen's, per doz 15 50
Single Bitted (without handles)
Gladstone, per doz $6 75
Hubbard's " " 6 50
Hunt's " " 6 25
Lippincott's " " 6 25
Mann's " " 6 50
Pioneer " " 6 50
U. S. A. " " 7 75
Valley Forge " " 6 00
Second Quality " " 5 75
Double Bitted (without handles):
Lippincott's ....per doz $8 50
Mann's .... " " 8 50
Pioneer .... " " 9 25
U. S. A. .... " " 11 00
Valley Forge .... " " 8 25
Ship, Blood's .... " " 18 50

BALANCES, SPRING.

Frary's 50%
Pelouze 20%

BAGS, PAPER NAIL.

Pounds.. 3 5 10 16 20 25
Per 1,000. $1 60 1 85 2 60 3 40 3 90 4 75

BARS, CROW.

Pinch or Wedge Point ....cwt. $3 40

BEAMS—SCALE.

P. S. & W. Co 40%

BEATERS.

Carpet, Rattan ....per doz $2 40
Raymond's Steel Wire, " " 80
Woven Wire, No. 4.. " " 1 10
Egg.
Dover Pattern ....per doz. $0 70
Genuine Dover .... " 0 90
Mammoth Dover .... " 1 75
Lightning .... " 0 84
Lyon's (standard size) " 1 75
Whip, French .... " 1 35
Spiral .... " 0 40
Spoon .... " 0 40
Surprise ....per gro. 1 45

BELLOWS.

Blacksmiths' ....70&5%
Hand, 8 in. ....per doz. $ 6 85
10 in. .... " 8 40
Molders', 12 in. ....per doz. 13 00

BELLS.

Call.
2¾ in. nickeled bell. per doz. $ 1 35
2¾ in. " brass bell" 3 60
3 in. " " " " 7 50
3 in. " silver alloy bell, ...per doz. 16 50
4½ in. " brass bell and base ....per doz. 14 50
Cow.
Ordinary Goods ....70&5%
High Grade ....60&10%
Jersey ....70&10%
Door.
Bigelow Automatic.. per doz. $9 50
Rotary.
3 in. bronzed iron bell " 5 25
3 in. nickeled " " " 7 50
3½ in. " " " " 9 00
Hand.
Hand Bells, Polished ....60@60&10%
White Metal 50%
Nickel Plated 40%
Swiss ....60&5%
Silver Chime 33⅓%
Miscellaneous.
Church and School, Steel Alloy, ...50, 10 & 5%
Farm, lbs... 40 50 75 100
Each. $1 10 $1 30 $1 85 $2 65
Miscellaneous Cont.
Strapped Sheep ....per doz. $1 90
House Gong ....40&5%
Sleigh, Round, Loose ....40&5%

BELTING

Leather—List dated Nov. 12, 1901.
Standard 75%
Eclipse ....60-10&5%
Extra Grade .... 50&10%
Rubber—
Standard ....75&5%
Amherst ....65&10%
Extra ....60&3⅓%

BEVELS—TEE.

Stanley's, rosewood handle, new list ....40&5%
Stanley's Iron handle ....40&5%

BINDING—OIL CLOTH.

Zinc ....75, & 10%
Brass 75%
Brass Plated ....75 & 10%

Auger. BITS.
Extra Double Spur ....70&5%
Ford's Car and Machine ....40&10%
Ford Improved ....40&10%
Ford's Ship ....40&10%
Irwin ....30&10%
New Jenning's 50%
Russell Jenning's ....25&7½%
Clark's Expansive ....50, 10&5%
Steer's " Small ....
new list $23.0
Irwin Car ....30&10%
Snell's Car ....60&5%
" Ship ....40&5%
" " Auger Pattern Car..40&5%
Center ....40&10%
Countersink—
Wheeler's ....per doz. $1 60
American Snail Head " 0 70
" Rose " " 0 80
" Flat .... " 0 70
Buck Bros'. Flat .... " 2 60
German .... " 0 70
Dowel, New Jennings ....40&10%
Gimlet—
Standard Double Cut 50&5@50&10%
German Pattern ....per doz. $0 48
Gouge .... " 0 80
Spoon .... " 0 80
Countersink .... " 1 20
Reamer—
Buck Bros.' ½ Round. " 2 75
" " Square .. " 2 50
Standard ½ Round ... " 0 75
" Square .... " 0 75
German Octagon... .. " 0 75
Screw Driver—
Round Shank .... " 0 45
" " extra quality " 1 40
Square Shank .... " 1 10

BLACKING—STOVE. (See Polish.)

BLADES—SAW.
Butchers'—
Standard ¾ & 1¼in ....60&5%
Clock Spring ....60&5%
Star 20%
Hack—
Disston's ....35&5%
Griffin's ....35&5%
Star 20%
Wood—
Jackson's ....per doz. $2 25
Disston's—No. 6, 16, 26 & 045, $4 20; No. 11, $6.30.
W. M. & Co.'s No. 20..per doz. $5 50

Snatch— BLOCKS.
Wooden ....50&10%
Steel ....40&10%
Tackle—
Wooden ....70&5%
Steel ....50, 10&5%

BOARDS.
Stove 40%
Wash—
Anchor ....per doz. $1 60
Globe .... " 2 10
Banner .... " 2 60
Crystal .... " 3 15
Brass King .... " 3 15
Nickel Plate .... " 3 15
Enamel King .... " 3 15

BOBS—PLUMB.
Carpenters', 8¼ oz. iron..pr dz. $0 65
1½ lb. " " " 1 60
2¾ lb. " " " 1 80
13 oz. lead.... " 2 00
6½ oz. brass. " 2 20
Mason's, 2 lb. lead .... " 4 00

BOILERS—FARM.
Profit ....30&5%
Solo ....35&5%

BOLTS.
Carriage, Machine, Etc.
Carriage. ⅜x6 and sizes smaller and shorter .... 75&5%
Carriage, ⅜x6 and sizes larger and longer 75%
⅜x6 and smaller .... 75&5%
⅜x6 to ¾x12 .... 75%
¾x12 and larger .... 70&10%
Elevator .... 50-10&5%
Plow .... 50&10%
Stove 60-5%
Tire .... 72½&5%
Wagon Box Strap .... 70&10%
Mortise Door—
Gem .... 50-10&5%
Ives' .... 50&10%
Barrel—
Cast 50%
Wrought .... 50&5%
" Bronzed .... 75&5%
Flush, Wrought, B. K .... 40&5%
Spring—
Wrought .... 75&10%
" Brass .... 75&10%
Square—
Cast 40%
Wrought .... 60-10&10%

BORERS.
Angular, Miller's Falls, per doz $12 75
Bung, Common Ring with Handle—
Inches 1¾ 1¾ 2
Per doz $6 00 6 90 8 10

BORERS—CONTINUED.
Enterprise Mfg. Co., No. 1 List $1.50; No. 2, $3.00 each....25-10&5%

BOXES.
Mail, No..... 5 10 20
Per doz..... $3 65 10 50 13 00
Mitre—
New Langdon.....15&5%
Olmsted's 15%
Stanley's.....30%
Seavey's .....per doz 8 00
Twine, Nos... 20 30 25 121
Per doz $1 50

BRACES.
Common Ball.....$1 35@1 45
Barbers' Pattern .....60&10%
Fray's Gen. Spofford's.....50&10%
" No. 66 to 146.....50&10&7½%
P. S. & W. Co.'s Peck's Adjustable.....50-10&5%

BRACKETS.
Hay-Rack, Wenzelmann's No. 1, $12.60; No. 2, $13.20 per doz.
Shelf—
Cast Iron, Plain .....50&10%
Stanley's Wrought Steel.....
.....70-10&2½%
Wire.....75-10&5%

BROILERS.
Wire .....70&10%
Crown, Self-Basting, No.80..doz. $2 90

BUCKETS.
Pump Rubber—
Wychoff.....per gr. $4 75
Cooper..... " 5 50
Champion ..... " 7 50
Victor ..... " 9 50
Star..... " 5 00
IXL..... " 6 75
Well—
Galv'd Qts..... 8 10 12
Per doz $2 50 2 85 3 15
Wooden, top ear, plain, per doz 3 50
" " swivel " 4 00
" side-strap, plain " 3 60
" " swivel " 4 75

BUCKS, SAW.
Folding .....per doz $1 75

BURS, RIVETING.
Copper Burs Only.....35-10&5%
Tinners' Iron Burs Only.....70%

BUTTS.
Cast-Iron.....65&10%
Wrought Brass.....20%
Wrought Steel Bright—
Nos. 800, 804, 808, 810, 814 and 834
.....70-10-10&5%
Nos. 838, 840 and 843 ...70-10-10&5%
Nos. 823 and 828.....75-25-10-10&5%
Wrought Steel, Japanned—
Nos. 731 and 737.....70&10&10%

CALIPERS.
Double .....40&10%
Inside and Outside.....40&10%
Wing.....40&5%

CALKS.
Logger's Boot,(Lufkin R. Co's.)
.....per M $3 65
Toe.
Shoenberger.....per lb. 5c
Bessemer ..... " 5½c
American ..... " 7¼c
Swedes..... " 8¾c

CANS.
Cheese Factory Can Stock—
Gallons.... 15 20 30 40
Per set....$3 15 $3 20 $3 40 $4 65
Milk
Elgin Pattern,
Nos.....808, 810, 88.
Gal. 8 10 8
per doz....$22.50 $22.75 $23.15
New Elgin Pattern,
Nos. 105 108 110
Gal. each, 5 8 10
Per doz., $16.75 $18.50 $19.85
Iowa Pattern.
Nos. 508 610
Gal. 8 10
Per doz. $21.50 $32.75
New York Pattern,
Nos. 908, 910,
Gal. each, 8 10
Per doz. $25.15 $26.95
Oil—
1 Gal. glass, Daisy....per doz. $2 35
1 " cushioned " 3 90
Star, gals..... 1 2 3
Per doz..... $1 85 $3 00 $3 90
Per doz.
Champion Faucet, 5 gallon...$ 5 65
Sterling Tilting....5 " ... 8 25
"High C" Pump...5 " ... 9 25
Eureka Pump.....5 " ... 12 25
Wood Jacket.....50-10&5%

CAPS—GUN.
See Ammunition.

CARRIERS.
Hay—
Myers' Imperial.....each $3 40
" Clover Leaf..... " 3 40

CARTRIDGES.
See Ammunition.

CASTERS.
Acme—Ball Bearing.....35%
Bed.....60, 10&5%
Common Plate—
Brass wheel.....60&10%
Iron and porcelain wheel.60, 10&5%
Philadelphia Plate.....70&5%
Martin's.....40-10&5%
Payson's.....75%
Tucker's—Wood and iron wheel..70%
" Rubber wheel.....65&10%

CATCHERS—GRASS
Lieder's No. 1.....per doz, $6 25
Eureka..... " 4 25
deal No. 4..... 50

CHAIN AND CHAINS.
Breast Chains—
Doubleslack.....doz. pairs $5 00
With Covert snaps " 4 75
" slide..... " 2 90
Without slide..... " 2 60
Bright Ox Chains—
5-16in. $5 70: ⅜in. $4 65 per 100 lbs.
Bright Coil Chain—
American, new list.....33⅓%
German.....60-10&5
Triumph, new list.....30%
Cable Coil Chain—
Inch..... 3-16 ¼ 5-16 ⅜
Per 100 lbs....$9 75 $6 45 $5 20 $4 15
Inch ..... 7-16 ½ ⅝ ¾
Inch ..... ⅞ $3 70 $1 00 $3 65
Per 100 lbs....$4 10 $3 95 $3 90 $3 75
Cable Log Chain—Advance 25c per 100 lbs. on Cable Coil.
Cow Tie Chains—
American 2 toggle.....40-10 & 5%
" toggle and snap, 40-10&5%
" open and closed ring.....40&5%
Halter Chains—
American, new list.....33⅓%
German.....60-10&5%
Niagara, new list.....40&5
Triumph, " 30%
Jack Chain—
Brass.....60%
Iron.....60%
Picture Chains—
Light Brass, 3 ft.....per doz. 63c
Heavy " 3 " ..... " 75c
Pump Chain—Galvanized per 100 lbs..... $4 45
Safety Chain—Brass.....60&10%
Stretcher Chains—
5-16 in., $7.75—⅜ in., $7.00 per 100 lbs.
Tie-Out Chains—Browns.....70&10%
Trace Chains—Western Standard—
6½— 6-2.....per pair 26c
6½— 8-2..... " 30c
6½— 8-3..... " 29c
6½—10-2..... " 35c
7 —10-2..... " 40c
Add 2c per pair for Hooks.
" 2c " for Twist Link
Wagon Stay Chains—
Inch ¾ 5-16 ⅜
Per 100 lbs. $6.50 $5.00 $5.25
Well Chains—
With Swivel.....per doz. 95c
Without " ..... " 80c

CHALK-CARPENTERS'.
Blue.....per gross 58c
Red..... " 48c
White..... " 38c
Common White Sch'l Crayon..... " 5½c

CHARCOAL.
In barrels ..... per bu. 21c

CHECKS-DOOR.
Blount 30%
Blum-Jap'd, $6.25; Brzd., doz... $7.00
Columbia.....50, 10&5%

CHIMNEY TOPS.
Iwan's Volcano.....50%
Box—

CHISELS.
Inches..... 10 12 14
Round....per doz. $2.10 $2.25 $2.75
Flat.....per doz. 2.85 3.60 4.20
Cold—
Good quality.....per lb. 12@ 20c
U.S.A., extra quality..per lb. 28c
Socket, Framing and Firmer—
Barton's..... 20%
P. S. & W. Co's..... 70%
For beveled back, add..per doz..... 60c
Tanged, Firmer—
P. S. & W. Co's.....35&5%
With Handles add... per doz. 60c
Choppers, Enterprise Meat—
No. 12.....$2 75
No. 22..... 4 50

CHUCKS-DRILL.
Standard Tool Co.'s 40%
Goodell's, for Goodell's Screw Drivers.....per doz. $6.25
Yankee, for Yankee Screw Drivers..... 5.00

CHURNS.
Anti-Bent Wood, Gal.. 5 7 10
Each $3.90 4.15 4.40
Belle, Barrel.....70&5%
Common Dash, Gal.... 4 5 7
Per doz..... $7.25 7.75 8.25
Hero.....70%
Union, Gal..... 5 7 10
Each $3.65 3.90 5.00

CLAMPS
Adjustable—Martin's 40%
Carpenters'—Steel Bar..... 30%
Carriage Makers'—P. S. & W. Co.'s.....40, 10&5%
Hose—
Sherman's, brass, ¾ in., ...per doz. 33c
Double, brass, ¾ in...per doz. 65c
Saw Filers—
Disston's list, $30.00..... 30%
Stearn's, No. 0, $3.50, No. 1, $11.50, No. 3, $5.50 doz.
Wentworth's..... 40%

CLAWS-TACK.
Cast, wood hdle...per doz., 45@ 60c
Forged steel, wood handle .....per doz. 80c
Solid Steel.....per doz. $1.60
Giant..... .....per doz. .60

Drain— CLEANERS.
Iwan's Adjustable.....50%
Iwan's Stationary.....40%
Pot—Wire.....per doz. $0.45
Side-Walk—Steel.....per doz. 2.15
Window—
Peerless.....50, 10&5%
XLCR.....65&10%

CLEAVERS.
Family—Ajax, In..... 6 7 8
Per doz $5.50 5.75 6.25

CLEVISES.
Malleable.....per lb. 2¾c

CLIPS.
Axle.....65&5%
Damper—
Standard .....per doz. $0.70
Troy ..... " .38
Hame..... " .20
Emery— CLOTH.
Ajax.....50&10%
B. & A.....50%
Hardware Wire—full rolls (100 ft.)
2 to 8 mesh black, per 100 sq. ft. $1.85
9 to 12 " " " " 2.15
2 to 8 " galv, " " 2.70
7 and 8 " " " " 3.25
An extra charge is made for 50 ft. lengths, and a still further advance for smaller pieces.
Screen Wire—
12 mesh, painted, per 100 sq.ft. $1.20
14 " " " " 1.85

COCKS—BRASS.
Compression Bibb.....60&10&5%
" Lock.....60&10%
Lever Bibb.....70%
Liquor .....per doz..$6 75
Racking.....60&10%

COFFEE MILLS.
Enter. Mfg. Co., list Jan 17, '93...25%
Parker's.....50%
Arcade.....60&10%

COLLARS—STOVE PIPE.
Inches 5 6 7
Plain Tin....per gr. $2.50 $2.80 $3.75
Japanned Tin, " 3.90 4.20 5.40
Lacquered Brass" 3.30 3.60 4.80

COMBS—CURRY.
Nos. 000 20 321 330 417 416
Per doz. $0.32 .80 1.00 .95 .80 1.00
Nos. 531 533 530 535 545 390
Per doz. $0.96 1.20 1.10 1.65 1.40 1.30

COMPASSES.
Carpenter's..... 70%
Pencil—Faber's.....per doz. $1.00

COOLERS—WATER.
Galvanized Lined—Lever Faucet.
Gal. 2 3 4 6 8
Each $1.35 1.65 2.00 2.35 2.95
Galvanized Lined—Telegraph Faucet
Gal. 2 3 4 6 8 10 15
Ea $1.65 2.00 2.35 2.65 3.30 3.65 4.90
Porcelain Lined—
Gal. 3 4 5 6 7 8 10
Ea $4.50 5.75 7.00 7.75 8.60 10.40 12.25

COPPER—SEE METALS.

COPPERS.
Soldering—1 to 2 lb.....per lb. 25@29c
3 lb. and larger..... " 23c

CORD.
Picture—White Wire—List October 1900.....80&10%
Sash—
Baltic Braided Flax...per lb. 21 c
India Hemp, cable laid " 13 c
" " hawser " " 12 c
" " plain " " 13½c
Italian " cable " " 21½c
Russian " " " " 17 c
Samson, white " 31½c
" spot " 30½c
Silver Lake, white " 29 c
" " drab " 29 c

CORKSCREWS.
Humason & Beckley.....33⅓%
Walker's.....33⅓%
Williamson's Regular.....50%
Williamson's Forged Worm.....50%

COTTERS—SPRING.
5-16 in. and smaller..... .....80&5%
⅜-in. and larger.....75%

COUPLINGS—HOSE.
Brass .....per doz. $1.00
Brass Plated..... " 85

COVERS, WAGON—SEE TENTS.

CRADLES—GRAIN.
Morgan's Grapevine ..per doz. $22 25

CRAYONS—SEE CHALK.

CROOKS—SHEPHERDS'.
American Pattern .....per doz. $6 75
Montana " ..... " 8 00
Scotland " ..... " 8 00

CROW BARS.
Pinch or Wedge Point, per 100 lbs..... $3 40

CUTTERS.
Meat—
Enterprise Nos. 5, 10, 12, 22, 32, and 42.....25%
No. 100, list, $18.00.....40&10%
Nos. 2 and 4.....35%
Ideal.....per doz. $9.75
Universal....No. 1 2 3
Per doz.....$10.75 $13.00 $18.00
Pipe-Stanwoods No. 1 2 3
Each.....$ .85 1.50 4.00
Slaw and Crout—
3-knife Crout.....per doz. $9.25
1 " Slaw..... " 1.50
2 " " ..... " 2.10
Washer..... " 7.75

DAMPERS—STOVE PIPE.
Standard.....50&10%
American.....40&10%

DIES—STOCKS AND
Discount..... 40%

DIGGERS.
Post Hole—
Iwan's Split Handle..per doz. $8.00
Iwan's Perfection....per doz. 8.00

DIVIDERS.
Wing 70%
Extension Wing.....35&5%

DIGGERS—POST HOLE.
Atlas .....per doz. $8.50
Eagle..... " 6.25
Eureka..... " 6.50
Hercules ..... " 10.25
Ryan's..... " 17.00
See also Augers—Post Hole.

DOORS—SCREEN.
⅞ in. 4 panel painted per doz. $ 6.85
1⅛ " " " 7.50
1⅛ in. 3 panel natural pine, fancy .....per dez.. 11.10

DOOR HANGERS—BARN.
Single Flange, D. B. Rail, ...per 100 ft. 1 60
Novelty Check Back, ... 3 in 4 in 5 in 6 in
Per doz. pairs, $2.60 $3.90 $4.95 $6.25

DRILLS.
Bit Stock.....60% & 65&5%
Blacksmith's Twist.....60%
Breast—
Common.....each, $2.25
Millers' Falls..... " 2.10
Hand—
Goodell's Automatic—per doz.
No. 01 No. 03 No. 3 No 20
$7.75 $12.50 $14.25 $11.00
Goodell's Single Gear per doz. $16.00
Millers' Falls " " " 12.50
" " Double " " 15.00
Reciprocating—
Goodells'.....per doz. $17 00
Bit Stock.
Standard List....60&5% @50% @10%

DRIVERS—SCREW.
Hurwood .....40&10%
Standard.....65&10%
Ajax.....70&5%
Champion.....50%
" Pattern.....75&5%
Clark's Interchangeable.. .... 33⅓%
Edison.....60%
Reed's Lightning.....50%
Goodell's Spiral.....50&10&5%
Yankee Ratchet.....50%
" " Spiral.....50&10&5%

ELBOWS.
Conductor.....,60%
Adjustable Stove—In. 5 6 7
Smooth....per doz. $0.95 0.95 1.40
Plan'd..... " 2.10 2.25 3.00
Corrugated Stove—In. 5 6 7
Smooth.....per doz. $0.95 .95 1.40
Pol'd..... " 1.70 1.75 2.60
Plan'd..... " 2.60 2.85 3.50
Four-Piece Stove—In. 5 6 7
Smooth....per doz. $0.57 .60 .98
Pol'd..... " 1.00 1.05 1.50
Plan'd..... " 1.50 1.70 2.00

EMERY—TURKISH.
Size .....5-lb. pkgs. ½ kegs, kegs
No. 60 to 150, ⅌ lb. 6½c 4¾c 4½c
Flour.... " 5½c 3¾c 3½c

ENAMEL—IRON.
English, ½-pt. cans...per doz. $1.50
Nubian, " " ... " 1.80
O. V. B., " " ... " 1.35
Peerless 1 50

EXTRACTORS—PIG.
See Forceps, Pig.

EYES.
Bright Wire Screw—See Goods, B. W.
Drifting Pick .....60&10%
Hooks and—
Brass.....60&5%
Iron .....65&10%

FASTENERS, STORM SASH.
Moore's.....per doz. $0 80
Schroeder's..... " 1 50
Sensible..... " 1 10

FASTENERS, BLIND.
Zimmerman's.....Net

FAUCETS.
Angle Plug.....per doz. $0 84
Brass—Andrew's .....60&10%
Petroleum.....60-10&5%
Wood—Cedar .....40&50%
Cork Lined.....60%
Metal Key.....65&5%
Measuring—Enterprise.....35&5%
See also Cocks.

FILES AND RASPS
Black Diamond.....70&10%
Disston's .....75&10%

FILTERS.
Improved Natural Stone.$3 50@13 50
Subject to large discounts.

FORCEPS—PIG
Barber's.....per do $7 25
Superior..... " 4 75
Whisson's Imp..... 6 00

FORKS
Barley—
Steel.....60&20%
Wood, 4 tines, $5.50; 6 tines, $6.50 doz
Coal 40%
Coke 40%
Cottonseed 40%
Hay—
Diamond, 2 tine.....50, 10&5%
" 3 " .....60&5%
" 4 " .....60½&10%
Golden Eagle, 2 tine .....60½&10%
" " 4 " .....60&10%
Digging..... .....60&10%
Scoop.....35%

FORKS—CONTINUED.

Header—
Diamond, 2 tine.....67½&10&5%
" 3 " 65%
" 4 " 65%
Golden Eagle, 4 tine.....10&10&5%
Manure—
Diamond.....60 15&2½%
Golden Eagle.....66⅔&10%
Ore.....40%
Spading—
Diamond .....70&2½%
Golden Eagle.....70&2½%
Hack Saw— FRAMES
Crown.....per doz., $ 6 25
Miller's Falls..... " 10 00
Star..... " 2 85

FREEZERS—ICE CREAM

Arctic—Qts... 1 2 3 4 6
Each.....$1 10 1 30 1 50 1 80 2 30
Qts..... 8 10 12 15
Each.....$2 95 3 80 4 50 5 20
White Mountain, with Crank—
Qts..... 1 2 3 4 6
Each.....$1 25 1 60 1 90 2 20 2 80
Qts.... 8 10 12 15 20 25
Each.$3 60 4 65 5 85 7 00 9 00 11 60

GATES.

Molasses and Oil.
Perfection.....50&5%
Stebbin's.....75&10&5%

GAUGES.

Butt and Rabbet.
Stanley R. & L. Co.'s..20&10&2½%
Cream Pail, Fairmont, per doz..$3 75
Marking, Mortise, etc.....
.....50&10%@50&10&5%
Saw—Atkin's agle. 55c, dbl. 80c pr doz.
Wire.
Disston's.....25%
P. S. & W. Co.'s.....20%

GIMLETS.

Discount.....40@40&10%

GLASS—WINDOW.

Single and double strength, 6x8 to 16 x24..... 90&5%
Larger sizes .....90&5%

GLASSES—LEVEL.

Stanley R. & L. Co.....50&5%

GLUE

Bulk.
B Amber .....per lb 9½c
A White.....per lb 12½c
H. S. Amber.....per lb 17 c
Liquid.
Eagle .....40 %
LePage's—
List "A".....37½%
List "B".....33⅓%
List "C".....25 %

GOODS.

Bright Wire..... 80&15%

GREASE, AXLE.

Wood Boxes.
Diamond.....per gr. $5.00
Frazer's..... 9.25
Hub Lightning..... 5.25
Paragon..... 6.75
Wood Pails.
Frazer's, 15 lb. 78c, 25 lb. $1.30 each.
Hub Lightning, 15 lb. 52c, 25 lb. 65c each.
Tin Cans.
1 lb. Frazer's carriage, pr. doz. $1.30
1½ lb. " wagon.. " 1.80
3 lb. " " " 2.40
5 lb. " " " 3.50

GRIDDLES

Soapstone .....40&10%

GRINDSTONES

Family—In..... 7 8 9
Per doz $8 25 9 00 10 50
Loose.
Per ton .....$20 00@$31 00
Mounted—
Ball Bearing..... 1 2 3
Each $3 40 3 25 3 15
Common Bearing.. 1 2 3
Each $2 90 2 70 2 55

HAFTS—AWL

Brad—Common.....per doz., $0.18
Peg—
Common..... " 21
Patent, plain top..... " 46
" leather top .. " 52
Sewing—
Common..... " 21
Patent..... " 52

HALTERS

Jute Rope.....per dz $0 80
Sisal Rope..... " 1 95
Web ..... " 2 10
Leather, rope tie..... " 6 25
" leather tie... " 8 25

HAMMERS—HANDLED

Blacksmiths' Hand
Maydole's .....40&10%
Engineers'—
Maydole's .....40&10%
Farriers'.
Maydole's .....35&5%
Machinists'.
Maydole's .....40&10%
Nail.
Ajax.....per doz $5 75
Calumet..... " 3 40
Cast..... per doz $1 10@$1 50
Maydole's .....30&7½%
Vulcan .....35&5%
Riveting.
Maydole's.....35&5%
Shoe.
Cast.....per doz 75c
Tack.
All Iron .....per doz $0 35
Pol'd Iron, Hickory hdl " 0 52
Mall. Iron, Inlaid..... " 1 50
Magnetic 1 2 3
Per doz..... 70c 80c 95c
Magazine.....per doz $4 75

HAMMERS—HEAVY.

Heavy Hammers and Sledges.
Under 5 lbs.....75&5%
5 lbs. and over .....75&10%
Masons'—Single & Double Face..75%
Auger. HANDLES.
Common Ass'd.....per doz $0 36
Peck's Adjustable.... " 2 10
Roger's " .... " 4 15
Ives' " ....per set 1 25
Axe.....40%
Chisel.
Hickory, Tanged Firmer, Assorted, 24c; Large, 26c per doz.
Hickory, Socket Firmer, Assorted, 18c; Large, 21c per doz.
Applewood, Tanged Firmer, Assorted, 27c; large, 36c per doz.
Applewood Socket, Firmer, Assorted .....per doz 24c
Coal Pick.....40%
Drifting Pick.....40%
File, assorted 13c, large 16c per doz.
Hammer.
Adze Eye.....per doz 42c
Blacksmiths'.....per doz 45c@65c
Machinists'..... " 39c@58c
Hatchet.....per doz 42c
Hay and Manure Fork.....40&10%
Hoe and Rake .....40&5%
Saw, Plain 72c, Varnished 68c per dz.
Screw Driver, Assorted 42c, Large 48c per doz.
Shovel and Spade 40%

Barn Door—HANGERS

Cronk's Automobile Loose Axle.....60%
Cronk's Automobile Roller Bearing. .....60&20%
Cronk's Loose Axle Endless Run .....60&10%
Cronk's Roller Bearing.....70&5%
King .....per doz. prs., 5 00
Monarch .....60&10%
"Never Jump" Hinge.....50&10%
Peerless, Loose Axle.... ..60&10%
Perfection, Roller Bearing..70&5%
Phoenix, Roller Bearing... 70&5%
Prouty .....per doz. prs., $5 50
Rival..... " " 3 90
Superb ..... " " 6 25
Safety Flexible " " 6 65
Wagner's Adjustable.....70@10%
Warehouse 60%
Conductor Pipe—
Iwan's Perfection.....50%
Parlor Door—
Acme.....per set $3 75
Ives' Improved ..... " 2 50
Lane's Standard..... " 3 50
" New Model.... " 2 80
Prouty..... " 3 00
Lundy.....50&10%
Eave Trough—
Baker's.....per gr., $3 60
Imperial 10%
Wire 25%

HASPS.

Hinge, Wrought.....70&5%
With Staples—See Staples.

HATCHETS.

Ajax .....40&10&5%
Blood's.....40&10%
Cast Claw.....per doz $1 50@$1 75
Cast Shingling.... " 1 20
Duffy's Barrel.....per doz 17 50
Germantown .....35&5%
Hammond's.....30&10&5%
Roger's Ideal.....per doz $5 25
Underhill's Star Lath.....40%
S. A.....30&10%

HAY RACK BRACKETS.

Wenzlemann's No. 1, per doz...$12 60
" No. 2, " ... 13 20

HINGES.

Blind.
Clark's Gravity, per doz sets....80c
Parker's.....65%
Shepherd's Noiseless, for Wood casing.... .....doz. $1 65
Gate.
Clark's, 1 2 3
Hgs & Ltchs, dz.. $2 35 $2 60 $3 60
Hinges Only, " .. 1 70 1 90
Latches Only, " .. 0 70 0 75
Knuckle.....per doz prs $6 00
Leed's..... " sets 6 75
Superior ..... " prs 9 25
Spring.
American.....35%
Bommer Bros. Ball B'g Floor 40-10%
Bommer Bros. Spring Hinges ..40%
Chicago.....25&5%
Clover Leaf.....per gro $9
Columbia Dbl. Acting....40&10&5%
Gem 25%
Ideal Detachable,....per gro $12 00
New Idea ..... " 9 60
Oxford.....30%
Wrought Iron.
Light Strap Hinges .....80-10&5%
Heavy Strap Hinges.....
.....80-20-10-10%
Light T Hinges.....75-10-10-10%
Heavy T Hinges.....70-10-5%
Extra Heavy T Hinges.....
.....80-20-10%
Cor. Heavy Strap 80-20-10-10%
Cor. Ex. Heavy T 80-20-10%
Screw Hook and Strap.
6 to 12in.....per 100 lbs. $4.00
14 to 20in ..... " " 3.75
22 to 36in ..... " " 3.50
Screw Hook and Eye.
⅝ to 1in .....per 100 lbs. $6.50
⅞in ..... " " 8.00
1⅛in ..... " 10.00

HOES.

Garden.....70&10%
Grub:
Ajax .....50&10&5%
Extra.....60&5%
Hazel.....per doz $6 50
Ladies' and Boys'.....70&12½%
Mortar.....70, 10&10%
Planter's Eye.....62½%
Weed .....66⅔, 10&10%

HOOKS.

And Eyes.
Brass .....50&10&5%
Iron.....65&10%
Awning.....per gro $1 80
Belt
Brown's .....70&5%
Jones' .....65&5%
Bench—See Stops, Bench.
Box, In. 6 8 10 12
Doz.. $1 25 $1 60 $1 70 $2 25
Humason & Beckley's...pr dz $2 40
(See Goods, Bright Wire.)
Bush.
Common Axe Handle .....per doz $7 00@$8 50
Hamilton Pattern.....per doz $7 25
Clain—In. ½&5-16 ⅜ 7-16 ½
Per 100 $7 50-7 75 $9 50 $11 25 $12 00
Clothes Line.
Japanned.....per doz 21c@22c
Galvanized..... " 35c
Coat and Hat.
Cast Iron.....per gro 72c@$1 00
Gem Wire.....65&10%
Conductor.
Malleable.....50&10%@50&10&5%
Wrought.....40&10%@50%
Corn.
Common, unpolished, per doz. $1 30
" polished... " 1 70
"Cut Easy," .....per doz. 2 65
Clyde's, ... " 2 40
Brooke's..... " 2 65
Gate.—See Goods, Bright Wire.
Grass.
Common, Nos. 2 3 4
Per doz..... $1 70 $1 75 —
German .....per doz $1 90
Little Giant..... " 3 10
Wood's..... ... " 1 30
Hammock.
Common..... " 21c
With Plate..... " 36c
With Screw..... " 36c
Piggot's..... " $1 05
Lambrequin or Drapery...per gro 21c
Picture .....50%@50&10%
Potato and Manure.....60&15%
Screw, Brass.....80&20%
(See Goods, Bright Wire.)
Seat Spring .....per lb 5½c

HOOPS—TUB.

Ever Ready..... per case $1 65

HOSE—GARDEN.

Ply 3 4 5 6 8
Black, pr ft. 7⅜c 8½c 9⅜c 10⅜c 12½c
Cotton, 3 ply .....per ft 6⅜c
Red, 3 ply ..... " 7⅜c

HUSKERS.

Boss.
Nos. E A B P PX
Dz.$1 85 $2 00 $1 95 Gr.$5 90 $5 20
Nos.2000 3000 4000 O OX
Gr.$3 10 $6 75 Dz.$1 15 $2 20 $1 65
Brinkerhoff's .....per gro 14 50
Harrington..... ....per gro 4 20
Ideal—Nos. 102 101 100
Per doz..... $1 35 $2 50 $2 75
Johnson's ....per gro 7 75

IRON.

See Metals—First column.

IRONS.

Curling.
Common ....per doz 33c@48c
Princess.....per doz $0 60
Yale..... " 0 84
Oxford..... " 1 10
Ruby ..... " 1 50
Tourist, Folding ..... " 0 90
Pinking..... " 0 60
Plane.
Wood Bench.....20&5%
Stanley R. & L. Co. (new list)25&5%
Sad.
Charcoal.....per doz $10 75
Common, Polished, per 100 lbs 3 50
" Nickel Plated, " 4 75
Chinese Polishing.....per doz 7 60
Laundry, No. 1, $5 75; No. 2, $6.25 per doz.
Mrs. Pott's.
No. 50 J, Enterprise...per set $1c
No. 55 J, " ... " 78c
No. 50 T, " ... " 84c
No. 55 T, " ... " 81c
No. 50, Howells'..... " 77c
No. 55, " ..... " 74c
Tailors' Sad .....per lb 4½c
" Geese..... " 4½c
Tuyere.
Single Duck Nest.....per doz $5 25
Double " " ..... " 6 25
Sutton.....each 2 60

JACKS.

Locomotive .....75&5%
Wagon.
Meeker's .....per doz $1 25
Miller's No. 2 ..... " 7
Winner..... " 7

KETTLES.

Brass.....30%
Caldron.....50%
Copper.....per lb 27½c
Maslin.....70%
Sugar .....50&5%

KNIVES.

Best Topping.
Clyde, 9-in. Scimiter Blade.dz $4 25
" 12-in. Straight " .dz 2 50
Cooper's Hoop 15%
Corn.
Acorn.....per doz $3 65
Ajax..... " 2 25
Clipper, Light, $1 75; Heavy, $1 90 per doz.
Disston's.....per doz $3 15
Easy ..... " 7 75
Rugged Razor ..... " 2 40
H. S. Earle's ..... " 2 15
Drawing.
Standard.....70%
Adjustable 30%
Barton's Carpenters'.....10&5%
" Folding Handle....25&5%
Hay.
American, Sickle Edge...doz $10 25
Canton, Sickle Edge..... " 2 25
Heath's..... " 2 25
Iwan's Sickle Edge..... 10 00
Lightn'g, Holt's Genuine " 6 50
Lightning Pattern..... " 5 75
Wadsworth's Sp'r Point. " 2 75
Hedge.
Ajax, Heavy, $5 75; Ex. Heavy, $7 75 per doz.
Mincing.
Common, Single .....per doz 42c
" Double..... " 65c
Streeter, 4 Blade, $1 30; 6 Blade, $1 90 per doz.
Putty.
Common.....per doz 34c
Goodell's.....per doz $1 50@$1 80
Russell's..... " 1 75@ 2 25

KNOBS.

Base, 2½-in. Maple, Rubber Tip, ...per gro $1 60
Door, Mineral.....per doz 0 80
Porcelain ..... " 0 90
Jet..... " 0 85
Picture.....60&10&5%

LADDERS.

Common Long .....per ft 9c@14c
Extension .....per ft 13c
Step.
Common..... " 7c
" With Shelf, add 10c.
I X L.....per ft 17c
Miller's Household. per ft 13c@15c

LANTERNS.

Bull's Eye Police.
3-in Flash Light.....per doz $6 00
2½-in Regular..... " 4 00
3-in Regular..... " 5 00
Tubular, Beecer.....40&10&5%

LEADERS—CATTLE.

Nos. 1 2 3
Per doz... $0 70 $0 85 $3 75

LEATHER—LACE.

Cut .....50&10%
Sides, Ex. Quality.....per sq ft 20c

LEATHERS—PUMP.

Valve and Plunger.....50%

LIFTERS.

Stove Cover.
Japanned.....per gro $3 75
Coppered..... " 3 60
Chilkoot..... " 4 [illegible]
Devore's..... " 5 50
Zero ..... " 3 90
Transom, Payson's.....70&10%

LINES.

Chalk, Twisted in 20-ft hanks.
Nos. 15 14 13 12 11
Per doz.. 10c 12c 17c 23c 29c
Twisted in 50-ft balls.
Nos. 1 2 3 4
Per doz..... 24c 30c 36c 44c
Braided in 20-ft hanks.
Nos. 0 1 2
Per doz..... ..... 23c 30c 33c
Masons', in 100-ft hanks...doz $1 00
Clothes.
60-ft Jute .....per doz $0 95
72-ft " ..... " 1 10
60-ft Sisal ..... " 1 00
72-ft " ..... " 2 10
60-ft Cotton..... " 1 35
50-ft Braided Cotton..... 1 00

LINING—STOVE.

In Bricks.....per crate 43c

MACHINES.

Boring	Without Augers.	With Augers.
Ajax .....per doz	$5 25	$5 75
Angular... "	3 25	5 00
Boss ..... "	4 50	5 00
Upright... "	2 90	4 00

Leather Riveting.
Chicago, Pomeroy ....per doz $9 75
Excelsior..... " 2 50
Handy..... " 2 10
Little Giant..... " 3 10
Pony, Pomeroy..... " 8 00
Washing.
Boss. 1 2 3 4
Per doz.. $57 00 $63 00 $69 00 $80 00
Globe, No. 1.....per doz $51 00
O K Rotary..... " 55 50
Round Wayne..... " 26 50
U. S. Steel..... " 60 00

MALLETS.

Carpenters'.
Fibre Head, Small. Med. Large.
Per doz..... $5 00 $5 75 $6 75
Round Hickory.....per doz $1 75
" Lignumvitæ.... " 2 75
Square Hickory..... " 1 75
" Lignumvitæ .. " 2 25
Tinners'.
Applewood ..... " 1 25
Hickory..... " 2.0
Hickory Sheet Iron. " 25

Door.
MATS.
National Rigid.....50&5%
Queen Flexible.....50%
Stove.
Standrd Quality.....per gross $2 75
Best " (Pure) " 4 75
Wire Covered Asbestos, Ex.
Heavy.....per doz 1 00
MATTOCKS.
Ajax.....50&10%
Extra.....60&5%
MAULS.
Iron, lbs. 10 13 16 18 21
Per doz. $3 40 $4 20 $5 00 5 50 $6 00
Wood face, lbs. 10 11 12
Per doz..... $4 75 $5 00 $5 25
Wood Choppers'.
Lake Super'r & Oregon Pat.75&10%
MEASURES.
½ pk 1 pk ½ bu
Galvanized..per dz $3 75
Japanned... " $1 50 2 25 $2 90
Iron Bound. " 1 40 1 80 2 10
Babbitt. METAL.
Alm.....per lb 8¾c
Best..... " 23c
Common, No. 4..... " 6¼c
Copper Mixed..... " 18¼c
Magnolia Metal..... " 19c
Tony..... " 10¼c
See Metals—In first column.
MICA.
First Quality.....40, 10&5%
Second Quality..... 60%
MILLS—COFFEE.
Enterprise.....35&5%
National.....30%
Parker.....50&10%@60%
MOPS.
Brix.....per doz $3 15
Handled Cotton.
Lbs. ¾ 1 1¼ 2
Per doz.. $1 85 $2 20 $2 50 $3 15
MOWERS—LAWN.
Ball-Bearing.
In. 15 17 19 21
Each..... $7 50 $8 50 $9 50 $10 50
Champion.
In. 13 14 16 18 20
Ea.. $2 30 $2 35 $2 55 $2 65 $2 75
Champion, High Chief.
In. 16 18 20
Each..... $4 00 $4 50 $5 00
Cheap Grades.
In. 12 14 16 18
Each..... $2 10 $2 10 $2 20 $2 20
Clipper.....50&10&10%
Girard, in. 14 16
Each..... $3 75 $4 00
Philadelphia.
All Styles Except A & E 60&10&10%
Style A.....50&10%
Style E, High Wheel..60,10,10&10%
Drevels..... 50%
All Day.....Net Price
Horse. MUZZLES.
Nos. 1 2 3 4 5
Doz.$0 30 $0 50 $0 55 $0 70 $1 00
Horse Shoe. NAILS.
Ausable.....50%
Capewell.....10%
Perfect.....40&5%
Putnam..... 10-5%
Star.....35%
Picture.
Brass Head.....40&10%
Judd's.....40&10%
Brads.....80&10&10%
Wire Nails—Small lots.....$2.15
Car load lots..... 2.05
NETTING—POULTRY.
Galvanized Before Weaving.80&20
" After Weaving...80&15
Cut Pieces.....65&5%
NIPPERS.
End Cutting.
P. S. & W. Co.....40&5%
Stubb's Pattern.....40&10&5%
Hoof.
Heller's.....40&5%
P. S. & W. Co.....40&10%
V. & B.....40-5%
Hose. NOZZLES.
Genuine Boston.....per doz $3 40
Genuine Gem..... " 3 60
Magic..... " 3 60
NUTS—HOT PRESSED.
Square Blank.
In. ¼ ⅜ ½ ⅝ ¾ ⅞ 1
Lb. 7½c 5½c 4⅞c 4⅝c 4⅝c 4¼c 4¼c
Square Tapped.
In. ¼ ⅜ ½ ⅝ ¾
Lb. 14c 9½c 7¾c 6⅝c 6¼c
OILS.
Linseed, Pure boiled.....per gal 36c
" " raw..... " 35c
OILERS.
Chase Pattern.
Brass and Copper.....35%
Zinc.....60%
Engineers'.
Cannon.....10%
Tin.....per doz $2 50@$3 00
Machine.
Ajax.....per doz $0 80
Copper Plated Steel.. " 1 50
Malleable Iron.....40&10&5%
Tin.....per doz 55c@65c
OPENERS.
Box, in. 10 13 14
Flat...per doz $2 85 $3 60 $4 15
Round.. " 2 10 2 25 2 [illegible]
Can.
American.....per doz $0 [illegible]
Delmonico..... " 1 [illegible]
Never Slip..... " 0 45
Perfect..... " [illegible]

Tip Top..... " 0 84
Crate, V. & B..... " 5 75
OUTFITS—COBBLING.
Combination.....per doz $11 50
Economical..... " 4 90
Family..... " 10 00
PADLOCKS.
Standard Wrought.....70&10&5%
Champion.....50%
Eureka.....40&10&5%
Yale.....60&5%
Cream. PAILS.
14-qt., Without Ga....per doz $2 75
20-qt., " " .... " 3 25
20-qt., With Gauge.... " 4 20
Sap, 10-qt., Galvanized, $1 60; 12-qt., Galvanized, $1 85 per doz.
Stock, Galvanized.
Quarts. 14 16 18 20
Per doz... $3 75 $4 00 $4 65 $5 25
Water, Galvd, qts. 10 12 14
Per doz..... $1 75 $2 00 $2 35
Wood.
Cable, 2-Hoop, $1 70; 3-Hoop, $1 90 per doz.
Cedar, 3-Hoop, $2 85 per doz.
Standard, 2-Hoop, $1 55; 3-Hoop, $1 75 per doz.
PANS.
Dripping.....50&10&5%
Fry, Common.....60&10&5%
Acme.....66⅔&5%
Roasting.
Brownie.....Each 30c@37c
L. & H..... " 58c@80c
Building. PAPER.
Plain.....per 100 lbs $1 15
Tarred..... " 1 25
Tarred Felt..... " 1 80
Diamond A, Red Rosin.pr roll 0 60
Leader, Red Rosin..... " 0 50
Sand and Emery.
Ajax.....50&10%
B. & A.....50 & 5%
Wrapping.
Grecian Express.....per lb 3⅜c
Rag..... " 2⅜c
Apple. PARERS.
Bay State.....per doz $13 00
Reading..... " 6 75
Turntable..... " 6 00
White Mountain..... " 5 25
Potato.
Goodsell's Saratoga..per doz. $6 50
White Mountain..... " 6 00
PICKS
Adze Eye Ore.....60&5%
Drifting and Poll Picks.....60&10%
Ajax Railroad.....50&5%
Extra Railroad.....60&10%
Surface.....60&10%
PINCHERS.
Carpenters', wrt. iron, pol. steel jaws.....30%
Blacksmiths'.....50%
P. S. & W.....40&10&5%
Clothes. PINS.
Common.....per gr..$0 12
Hoyt's..... " .. 30
U. S..... " .. 70
Picket.
Fluted.....per doz..$0 80
Round..... " .. 1 75
Spiral..... " .. 1 90
PIPE.
Conductor. Nested Not nested
Eastern, A...7½&7½% 75&2½%
Eastern, B.75&10&2½% 75&7½%
Central.....75&7½% 75%
Southwst'n.. 70-&7½% 70&2½%
Texas.....70&7½% 7½&2½%
Mo. River...70&7½% 75%
Southern.....70&10% 70&5%
Lead.
Full coils.....per lb..$0 6
Cut " ..... " .. 6¼
Stove.
Acme—In. 5 6 7
Smooth, per jt. 10½c 10½c 12½c
Planished, " ..22c 23c 43 c
Peerless—Smooth..8½c 9c 11½c
Polished. 16c 18c 22 c
Planished 28c 31c 40 c
Made-up—In. 5 6 7
Smooth..... 8¾c 9c 12 c
7 to 6 in. Smooth Tapers, pr jt..14c
6 in, Smooth T's..... " ..30c
7 to 6 in. Planished Tapers.....45c
Wrought Iron Gas Pipe.
¼-in., black.....discount, 60%
½ " ..... " 63%
¾-in. to 4-in, black.... " 69%
4½ " 6 " .... " 66%
7 " 12 " .... " 64%
¼ " galvanized " 48%
½ " " " 50%
¾ " to 4 " " 58%
4½ " " 6 " " 52½%
7 " " 12 " " 50%
PLANES.
Ohio.....60&5%
Stanley Planes, new list..30%@30&5%
Bailey Planes.....35%
Sandusky.....30%
Corn, PLANTERS.
Monitor.....per doz..$7 75
Triumph..... " .. 6 00
Potato
Acme.....per doz.. $6 25
Challenge..... " .. 10 75
Fencing.
Cronk's.....per doz..$0 25
Farmers' Choice..... " .. 8 75
Russell's..... " .. 8 65
Flat and Round Nose.
Bernard's.....30%
German.....50%
Lodi.....40%
Paragon.....40&10%
P. S. & W. Co.....60%

Gas—In. 8 10 12
Per doz..... $3.10 $4.00 $4.90
PLIERS.
Button's--In. 4½ 6 8 10
Per doz.....$2.60 $3.10 $3.90 $5.20
Button' attern.
In. 4½ 6 8 10
Per doz.. ..$2.35 $2.50 $3.45 $4.40
Cutting.
Bernard's.....30%
Cronk's Impr'vd Button Pliers.75%
Cronk's Linemans No. 80.....40%
Cronk's Stubbs Pattern.....50%
Cronk's No. 1.....60&10%
Cronk's Staple Puller Pliers..$3 00
Lodi.....40&10&5%
4 Tube, revolving.... " .. 5 25
Tinners'.
Hollow.....
Solid.....each..5½c
PLUMBS AND LEVELS.
Common.....75%@75&10%
Cook's.....40%
Davis' Iron.....30%
Davis' Inclinometer.....20%
Stanley's
Nos. 00S 0S 2S 3S
Per doz..$4.50 $5.20 $7.60 $8.65
Nos. 30 25 50 35
Per doz.$13.00 $17.50 $17.50 $12.35
POINTS. Discount
Drive Well Points.....80&10&5%
POKERS—STOVE.
Wr't Iron, str't or bent, per doz.$0 50
Wr't Iron, wood hand'ls " 75
Nickel pl'td. coil hdl's.. " 70
POKES--ANIMAL.
American.....per doz.....$2 60
Brown's, wr't steel " ..$5 25@6 25
Eagle..... " $4 25
Success..... " 2 60
POLES--FISHING.
Bamboo
Ft. 12 14 16 18 20
Pr 100..$3.75 $3.40 $4.75 $6.00 $7.75
POLISH.
Metal.
Pride of the Bar..... " .. 1 60
Putz Cream.
Pts. 1-6 ¼ ½
Per doz.....$0.84 $1.25 $1.80
Pts. 1 2 4 8
Per doz.$3.60 $6.00 $9.00 $18.00
White Silk, half pints, per doz.$2.00
White Silk, 6 oz. cans, per doz. 1.00
Wondershine
Pts. 1-6 ½ 1 2
Per doz...$0.66 $1.20 $2.15 $3.00
Shoe.
M. D. C.....per doz..36c@50c
F. C. O..... " 40c
T. M..... " 50c@$1 25
Imperial.....per gr.....$5 00
Stove.
Black Eagle, 1 lb cans, prgr..$15 00
Black Silk—
5 lb. pail..... 70c
Paste, 5 oz. cans per doz.....$1.00
Paste, ½ lb. cans, per doz... 1.00
Black and Japanned—
Liquid, ½ pint cans per doz. 1.00
Liquid, 6 oz. cans per doz.... 75c
Steel Range Gloss per doz... 1.75
Blackene, 1 lb cans....pr gr.. $3 00
Black Jack, ¾ lb cans. " .. 9 00
Dixon's Carb. of Iron. " .. 5 75
Nickel Plate..... " .. 4 50
POPPERS, CORN.
Round or Square, 1 qt. per doz., 85@95c
Square, 1½ qt.....per doz., $1 00
Square, 2 qt.....per doz., 1 25
1 qt. reversible.....per doz., 1 50
POTS—FIRE.
Bernz.....each..$3 85
Clayton & Lambert's, each, $4 75@6 25
Gate City.....each.. 6 25
Gem..... " .. 6 75
POWDER.
See Ammunition.
PRESSES--FRUIT AND JELLY.
Enterprise Manufacturing Co... 25%
Henis.....per doz. $2 10
PRUNERS.
Disston's Pole.....per doz..$7 50
Henry's Improved..per doz..65&10%
Water's Improved. " 70, 10&5%
PULLERS.
Cork.
Modern.....each..$2 60
Quick and Easy..... " .. 2 90
Nail.
Giant.....per doz..$9 00@10 50
Giant Pattern. " .. 6 00
Tack--Giant.... " .. 60
PULLEYS.
Awning--Jap'd.....40&5% to 35&5%
Clothes Line.....20&10%
Hay Fork.
Iron Wheel, 5 in.....per doz..$1 85
Wood Wheel, 6 in... " .. 1 80
Wood Wheel, 6 in... pass knot..... " .. 2 25
Hot House--Jap'd.....30&5%
Screw..... " .....30&5%
Side..... " .....30&5%
Sash.
Chicago.....per doz..$0 29
Clark's..... " .. 43
Common Sense, 2 in.. " .. 27
" Pattern, 2 in.. " .. 22
Empire..... " .. 24
Ideal..... " .. 24
Grand Rapids, No. 17 " .. 24
" " No. 11 " .. 25
PUMPS
Pitcher Spout.
Nos. 1 2 3 4
Each.....$0.9 $1.05 $1.15 $1.40

PLATES--TIN.
See Metals in Column 1.
Spray.
Blizzard.....per doz..$14 25
Cyclone, tin..... " .. 3 90
" copper..... " .. 6 75
Daisy..... " .. 8 75
Little Giant.....each.. 2 40
PUNCHES.
Conductors', No. 22....per doz..$2 50
Machine.....per lb.. 19
Saddlers'.
Common.....per doz..60c@70c
Good..... " ..72c@84c
Spring.
1 Tube.....per doz. $2 25
PUTTY.
In Bladders.
Strictly pure.....per 100 lbs. $2 25
Commercial..... " " . 2 10
RAIL.
Barn Door.
Light Wrought.. .....per ft. 3c
Safety..... " 4½c
Single Flange..... " 1¾c
Smith's Wro't Bracket—plain 3½c
Smith's Special..... .....4½c
Smith's "Never Jump".....11c 50%
Smith's Plain Steel.....30%
Smith's Milled Steel.....4½c
Sliding Door.
Painted iron.....per ft. 4½c
Bronzed wr't iron..... " 8½c
RAKES.
Coal or Road.....per doz. $6.50
Garden.
Cronk's Champion.....70%
Cronk's Victor.. .....75%
Steel, braced.....75&15%
Steel, bow.....70%
Malleable iron, heavy.....70%
Hay—Wood.....per doz. $1 40@2 00
Lawn—Wood.
Common.....per doz. $2 50
Automatic..... " 6 00
New Lawn Queen.... " 3 60
Jumbo, 36 teeth..... " 6 50
RASPS—See Files
REGISTERS.
List July 1, 1903
Black and White Japanned .70 to75%
Nickel Plated.....70 to75%
Electroplated, Brass, Bronze or Copper.....70&75%
RINGS
and Ringers—Hog.
Blair's Rings.....per doz. 60c
Blair's Ringers..... " 84c
Brown's Rings..... " 65c
Brown's Ringers..... " 90c
Champion Rings..... " $2 25
Champion Ringers..... " 1 70
Hill's Rings..... " 48c
Hill's Ringers..... "70c@95c
Mazor Rings..... " 80c
Mazor Ringers..... " $1 15
Perfect Rings..... " 84c
Perfect Ringers..... " $1 05
Wolverine Rings..... " 1 50
Wolverine Ringers.... " 70c
Bull.
Copper, 2¼-in. 3-in.
per doz..... $1 35 $1 70
Steel.....per doz. 95 1 05
Steel, Nickel Pl't'd, 2¼-in., doz. 1 25
Rea's Self Piercing.. .....$1.05
Fruit Jar—White.....per lb. 30c
Key.
Split, round.....per doz. 1
Split, square..... " 22c
Ball, round..... " 22c
RIVETS.
and Burrs.
Copper Belt.....50&10&5%
Coppered Iron.....75%
Tinners'.....66⅔@60%
Hame.....per lb.
Slotted Clinch.....per doz. 70c@75c
Tubular—Nos. 1 and 2, assorted sizes.....per doz. 60c
ROPE.
Per lb.
Manila, 7-16 inch diameter and larger..... 11¾c
Sisal, 7-16 in. and larger..... 8½c
Cotton.
¼ and 5-16-in. on reels...per lb. 12c
¼ and 5-16-in. in coils... " 12½
RULES.
Boxwood.....60%
Ivory.....35&5%
Per ton, f.o.b. Chicago.....$30.00
SAWS.
Back.
Disston's.....35&7½%
Jackson's.....35&7½%
Butchers'—Disston's.....35&7½%
Circular.
Disston's.....50%
Hiles'.....50-10%
Compass.
Common.....per doz. $1 35@1 60
Disston's.....35&7½%
Cross-Cut.
Atkin's.....40%
Disston's.....40&10%&50%
Pocahontas Bit.....per ft. 30c
Pocahontas, Blued..... " 41c
Dehorning.
Atkins'.....per doz. $5 50
Disston's..... " 5 75
Hack.
Disston's.....35½%
Keystone.....33½%
Sterling Hack Saw Blades.....[illegible]
Sterling Hack Saw Frames.....[illegible]

SAWS—CONTINUED.

Hand and Rip.
Brown's .....30&7½%
Disston's No. 7.....30&7½%
Disston's Nos. 8, D8, 12, 76, 112, D100, and 120.....25&7½%
Gorham's Comb.....30&7½%
Keystone.....30&7½%
Sam Sickles', hand...per doz. $4 25
"I Will," hand..... " 5 75
"I Will," rip..... " 6 75
"U. S. A." hand..... " 12 25
"U. S. A." rip..... " 14 25
Keyhole—Disston's .....25&7½%
Kitchen.
Sterling.....25%
One Man 50%
Panel.
Brown's .....30&7½%
Disston's No. 7.....30&7½%
Disston's Nos. D8 and 12, D100 and 112.....25&7½%
"I Will" 40%
"U. S. A." .....40&10&5%
Pruning.
Avery's Duplex .....25&7½%
Brown's .....25&7½%
Disston's.....25&7½%
Wood.
Common.....per doz. $4 50
Handy ..... " 7 50
Happy Medium ..... " 7 00
Wood Sawyers' Delight " 8 25

SAW SETS.

Common Lever.....per doz. $ 1.20
Stillman's Lever.....per doz. 1.30
Leach's.....per doz. 5.00
Nash's.....per doz. 4.20
Monarch.....per doz. 6.50
Aikin's Pattern.....per doz. 3.50

SAW FRAMES.

Common, plain.....per doz. $1 20
" painted..... " 1 60

Counter. SCALES.

Fairbank's Standard.....30, 10&5%
Hatch's.....per doz. $21 50
Little Detective, 1 2 3
Each $2 00 2 25 2 10
No. 1 Tea .....per doz. 7 75
Union Platform.....each 2 40
Pelouze 30%
Turnbull's Market.....50%
Platform.
Common, 600 800 1000
Each $8 20 8 75 9 50
Chicago Standard.....30 to 33⅓%
Fairbank's Standard.....40%
Osgood.....50%

SCOOPS.

Ames.....10&10%
Eastern Pattern. Socket Strap.
Nos. 2 3 4 5 6
Per doz. $7.00 7.25 7.50 7.75 8.00
Nos. 7 8 9 10 12
Per doz. $8.25 8.50 8.75 9.00 9.50
Western Pattern. Socket Strap.
Nos. 1 2 3 4 5
Per doz. $7.00 7.25 7.50 7.75 8.00
Ajax. *Eastern Pattern*,
Nos 2 3 4 5
Per doz. $5.25 5.50 5.75 6.00
Nos. 6 7 8 9
Per doz. $6.25 6.50 6.75 7.00
Ajax. *Eastern Pattern*, extra heavy,
Nos. 3 5 6 7
Per doz. $7.25 7.75 8.00 8.25
Ajax. *Western Pattern*,
Nos. 4 5 6 7
Per doz. $5.75 6.00 6.25 6.50
Nos. 8 9 10 12
Per doz. $6.75 7.00 7.25 7.75

SCRAPERS.

Box.
Stanley's Adjustable; per doz. $3 60
Triangular..... " 2 50
Cabinet.
Ajax .....per doz. $2 25
Cast Steel ..... " 65c@75c
Stanley's No. 80..... " $6 40
Road.
Cubic ft. 7 5 3
Without runners, ea. $5.00 4.75 4.50
With runners.... " 5.25 5.00 4.75

SCREWS.

Bench.
Iron.....30%
Wood, white maple..per doz..$3 60
Hand--Wood.....20%
Hand Rail.....70&10%
Jack.....75&5%
Lag or Coach.....80&5%
Screw—Centennial.
Nos. 1 2 3 4
Per doz..... 22c 25c 32c 36c
Wood.
F. H. Bright Steel ....87½, 10&10%
R. H. Blued Steel.....85&5%
F. H Jap'd Steel.....82½&5%
F. H. Brass .....85&5%
R. H. Brass .....80&5%
R. H. Nickel Plated.....75%

SCYTHES.

Clipper, grain.....per doz..$7 75
Dutchman, grass ..... " 5 25
Golden Clipper, grass. " 5 00
U. S. A., grass..... " 5 75

SETS.

Nail.
Round, common.....per doz..$0 33
Square " ..... " 42
Octagon " ..... " 33
Square, Busk Bros.. " 1 25
Cup Point, knurled, pr doz. 70c@90c
Steel.
Farmers'.....per doz..$1 45
Tinners'.....50&10%
Saw.
Aiken's Pattern.....per doz..$2 50
Common Lever..... " 1 20
Disston's Monarch... " 6 50
" X Cut..... " 11 75
German..... " 1 35
Morrill's Old Style... " 5 00
" Pattern.... " 4 50
Leach's..... " 4 80
Nash's Hand..... " 4 00
" X Cut..... " 5 50
Stillman's Lever..... " 1 30
" X Cut..... " 2 50

SHARPENERS--SKATE.

Diamond.....per doz..$1 60

SHAVES--SPOKE.

Iron.....per doz..$1 35@22 75
Wood..... " 2 75@ 4 75
Bailey's.....50&5%
Goodell's.....15%
Stanley's Universal.....30&5%
Pruning. SHEARS.
Buckeye, No. 1.....per doz..$6 50
" No. 2..... " 8 50
California Pat., 9 in.. " 4 25
" 10 in.. " 5 00
Draw Cut, No. 3..... " 15 50
" No. 4..... " 18 50
Henry's Pat. 0 01 14 012
Per doz...$1.90 $2.50 $3.15 $3.50
Star.....per doz..$4 75
Sheep--No. BBA.
6 in. 6½ in. 7 in.
Reg.Grip..$11.25 $11.50 $12.00 doz.
Nar.Grip.. 11.75 12.00 13.00
Tinners'--See Snips.

SHEAVES--SLIDING DOOR.

In. 3 4 5
Common..Per set...$0.42 $0.48 $0.70
Hatfield's. " .. .75 1.00 1.60

SHELLERS--CORN.

Union .....per doz..$7 25

SHOT--See Ammunition.

SHOVELS AND SPADES.

Drain.
Iwan's Perfection.....50%
Railroad, Etc.
Gold Hibbard's.....per doz.. $9 25
C. H. Conovers's.... " .. 7 75
Beckwith's..... " .. 7 75
Hickory..... " .. 6 25
Greenleaf's ..... " .. 5 75
Columbus..... " .. 5 00
Ames' new list .....Discount 12½%
Coal.
No. 2 Ajax.....per doz..$5 25
No. 4 Golds..... " .. 6 25
Ames' new list.....Discount 12½%

SIEVES.

Champion.....per doz. $ .90
Hunter's Genuine..... " 1.10
" Imitation..... " .90
Tin Rim, 16 mesh plain wire" 1.35
Wood " 16 mesh plain wire" .80

SINKS.

Cast Iron.
Painted.....50&5%
Enameled, White ....60-10&5%
Wrought Steel.
Painted, new list.....40-10&5%

SLEDGES--See Hammers.

SNAPS—HARNESS.

Champion.....65%
German Pattern.....30&5%
Judd's Pattern.....60&10%@70%

SNATHS.

Double Ring, Bush....per doz..$6 75
Patent Loop " .... " .. 7 30
" " Grass.... " .. 6 50

SNIPS--TINNERS'.

Hernisch's.....40&5%
National.....40&5%
P. S. & W. Co.'s.....35&5%

SOLDER.

See Metals, Column 1

SPRINGS--DOOR.

Perfect. Nos. 1 2 3 4
Per doz..... 23c 38c 45c 48c
Reliance, Light $1.40, Heavy $2.30 doz.
Star..... " .90, " 1.30 "
Torrey's.....per doz..$1 35
Warner's— No. 1 No. 2
Per doz..... 72c $1 45

SQUARES

Steel and Iron 70%
(Add for Bluing, $2.50 per doz., net.)
Mitre--Stanley's No. 12 .....40%
Try.
Stanley's No. 20, new list...30&10%
" Nos. 12 and 14.....40%
Try and Bevel--Stanley's.....40&5%
Try and Miter.
Fox's.....per doz..$7 25
Winterbottom's.....50%

SQUEEZERS--LEMON.

Common Wood.....per doz..$0 72
Porcelain Lined, wood. " .. 1 20
Boss, tinned iron ..... " .. 84
Pearl, nickel plated... " .. 1 30
Star " ..... " .. 1 60
Little Giant, tin'd iron " .. 4 25
King..... " .. 2 50
Drum ..... " .. 4 50

STAPLES.

Blind—Barbed .....per lb. 9½@10c
Butter Tub..... " 8@8½c
Fence, less than carload.
Polished .....per 100 lb. $2 40
Galvanized ..... " 2 80
Netting—Galvanized.....per keg 3 60
Wrought.
Wrought Staples, Hasps and Staples, Hasps, Hooks and Staples, and Hooks and Staples .....85-10&5%
Extra heavy .....75&10%

STEELYARDS.

Discount 25%

STONES.

Axe.
Hindostan .....per lb. 5½@7c
More Grit..... " 9½c
Washita ..... " 15½c
Emery .....60%@60&5%
Oil—Unmounted.
Arkansas Hard .....per lb. $2 00
Arkansas Soft ..... " 1 15
Hindostan ..... " 6¼@6¾
Lily White..... per lb 43c
Queer Creek..... " 14½c
Ouachita..... " 36c
Washita..... " 25c
Sythe.
Black Diamond.....per gro. $7 75
Clear Grit ..... " 4 25
Gem Corundum..... " 7 50
Green Mountain..... " 4 20
La Moille..... " 7 00
White Mountain.....per gro. 6 50
Willoughby Lake .... " 6 25
Red End ..... " 3 15

STOPS—BENCH.

Hotchkiss'.....per doz. $3 60

STOPPERS—FLUE.

Common .....per doz. 42c
Crown..... " 48c
Gem, flat, painted..... " 72c
Gem, cor'd, decorated.... " 68c
Kirch's ..... " $1 20
Peerless ..... " 72c
Skinner's Common Sense " 95c

STRAPS.

Scoop .....per doz. prs. $1 80
Skate..... " " 60@70c
Carpet. STRETCHERS.
Bullard's .....per doz. $3 90
Excelsior ..... " 5 50
Malleable Iron..... " 70
Perfection ..... " 6 00
King ..... " 4 50
Wire.
N. S. Elwood's .....per doz. $5 75
O. S. Elwood's..... " 5 75
Little Giant ..... " 5 50
Star Lever..... " 6 25
Star Tackle Block.... " 9 25
Warner's ..... " 6 25

SWIVELS.

Malleable Iron .....per lb. 06c
Wrought Steel.....per gro. $4 50

TACKS.

American Cut.....90&5%
American Wire.....85&25&10%
Bill Posters Cut ....90&40%
Blued Carpet.....90&15%
Tinned Carpet.....90&15%
Gimp .....90&30&10%
Upholsters' Cut .....90&40&5%
Upholsters' Wire .....90&25%
Double Pointed .....90&20%
Copper .....per lb 27c
Canvas Nails.....75&5%
Clout Nails.....75&10&5%
Hungarian Nails.....80&5%

TAPES--MEASURING.

Asses' Skin .....40&10%
Bend Leather.....25%
Patent Leather.....25%
Lufkin's Steel.....30%
Lufkins Metallic 30%

TENTS AND PAULINS.

Wall Tents 50-15%
Wedge Tents 40-10%
Paulins 45-5%
Wagon Covers.....45-5%

THERMOMETERS.

Tin Case.....per doz., 95c@$1 25
Wood Back..... " $1 75@ 9 00
Glass ..... " 15 50

Bait. TIES.
Single Loop..... 80&10%
All other kinds.....70%
Cow--See "Chains."

TONGS.

Crimping—Packham's...per pair 50c
Gutter—P. S. & W. Co.'s.....15&10%
Pipe—Brown's 50%
Roofing—P. S. & W. Co.'s ....15&10%

TOOLS—SAW.

Atkin's Dexter.....per doz. $4 25
Atkin's Excelsior..... " 6 25
Disston's Universal 40%
McDonald's 33⅓%
Game. TRAPS.
Newhouse.....50%
New Victor 75-10%
Mole--Reddicks .....per doz. $5 75
Mouse and Rat.
Wood Choker.....per hole 11c
Tin Choker ..... " 9c
Delusion.....per doz. 85c
Imitation Sight, Rat .. " 80c
Marty Rat..... " $6 75
Marty Rat, Imitation.. " 3 75
Marty Mouse..... " 3 15
Marty Mouse, Imitation " 2 10
French Automatic..... each $3 60
Fly.
Balloon.....per doz. $1 10
Harper's..... " 1 25
Brick. TROWELS.
Standard.....30%
Brade's.....10&7½%
Disston's.....30%
Rose's.....25%
Plasterers'.
Standard 33⅓%
Disston's.....30%
W. & McP 25%

TRUCKS.

Bags.....each $1 70
Handy..... " 1 50
Warehouse.....60&5%

	No. 1	2	3
Half Ironed.....	$2.60	$3.40	$5.00
Full Ironed.....	3.90	5.75	8.75

TUBS-WASH.

	No. 3	2	1	Ex. large
Standard, per doz.	$5.25	6.25	7.25	9.75
Dowel .... "	5.60	6.60	7.50	10.00
Cedar .... "	6.50	7.50	8.25	
Indurated. "	7.20	7.95	9.45	11.70

Galvanized.

No.	1	2	3
Per doz	$5.25	5.75	6.50

TWINE. per lb.

3-ply Cotton Wrapping.....19c
4 " " " 19½c
4 " Extra Wrapping. 25c
4 " " Hvy. Wrap'g.23c
4 " Wrapping on tubes.25c
3 " " " cones.21c
4 " " " " 2 c
India Hemp, ¼-lb. balls.....18c
" " ½-lb. " ... .17c
" " ¼-lb. " ...doz., 65c
2-ply " ¼-lb. " 11½c
3 " " ½-lb. " 11½c
Jute Wrapping, ½-lb. balls.....11½c
Jute Wool, 1-lb. balls.. .....6c
Stagging, ¼-lb. ball, size 21.....22c
" ¼-lb. ball, " 24.....21c
" ¼-lb. ball, " 27.....21c
Bagging, ¼-lb. ball..... .....22c
3-ply "B" in hanks.....19c
4 " "B" " " 19c
3 " "A" " " 29c
3 " Silver Finish, in hanks....39c
Fodder or Lath.
130-strand..... .....8c
200-strand..... 8½c

VISES.

Bonney's.....30%
Cheney's 20%
Parker's Oval Slide.....50@50&10%
Parker's Parallel.....15@20%
Parker's Victor.....10%
Parker's Combination.....50&10%
Solid Box.....60&5%
Adam's Mechanics'.....each $3 50
Williamson Universal.....20%

WARE,

Cast-Iron Hollow.
Ground ..... 40, 10&2½%
Unground.....50, 10&2½%
Extra Finished.....40%
White Enameled.....40&5%
Muslin Kettles.....65%
Enameled.
Adamant, one coat, 70&10%@75&10%
The manufacturers divide this ware into two classes, which take different discounts, noted above.
Chrysolite, three coat.....40&5%

WEDGES.

Axe.....per doz....30c
Galling .....per lb..10¾c
Saw..... " .. 8¾c
Wood Choppers.
Lake Superior and Oregon, Pat .....per lb.. 9¾c
Reg. Pattern, Steel... " .03-⅛c
Truckee " " " .03-⅞c

WEIGHTS.

Hitching.....per lb..2½c
Sash--F.O.B. Chicago..pr ton..$22.50

WHEEL BARROWS.

Common Railroad....per doz..$16 00
Heavy " .... " .. 19 50
Railroad, ball bearing " .. 19 00
Santiago Steel Tray.. " .. 26 50
No. 04 Steel Dirt ... " .. 52 00
No. 04½ " " ... " .. 56 00

WHEELS.

Corundum.....70&10&5
Emery.....75&5%
Well. In. 8 10 12 14
Per doz.... $1.90 $2.20 $3.00 $5.50

WIRE.

Barbed.	Painted.	Galv'd.
Carloads...pr 100 lbs..	$3.50	$3.65
Less than car " ..	2.40	2.70

Brass.
In coils..... .....20%
In 1 lb. spools, new list.....50&10%
Broom--Tinned.....60&10&10&10%
Cable—Same price as Barbed Wire.
Copper.
In coils.....30&10%33⅓%
In 1 lb. spools, new list.....50&10%
Fence--Smooth.
Nos. 6 to 9, Annealed, pr 100 lbs. $3.00
Nos. 6 to 9, Galv'd... " 2.30
Hair--New list.....50&10%
Market.
Bright, full bdles.....70&10%
Bright, broken bdles.....70%
Coppered, full bdles.....70%
Coppered, broken bdles ....65&10%
Tinned, full bdles..... .....70&5%
Tinned, broken bdles.....65&10%
Picture.
In coils.....80%@80&10%
In 5 lb. spools .....per lb..25c
Plain—Small lots.....$2.00
Car lots..... 1.95
Small spools 5c per hundred higher

WRENCHES.

Acme Standard.....60%
Alligator .....65&5%
Always Ready.....40&10&5%
Bemis & Call.....40%
Coe's Standard..... .....40&10%
Girard's Agricultural.....80%
P. S. & W. Co.'s Agricultural....75%
" " Knife H'dle..50&5%
Wescott's "S ".....33⅓%
Malleable "S ".....per lb. 05½c
Malleable.....per lb. 05½c
Stillson Pipe.....60&5%
Trimo " 60%

WRINGERS.

Clothes.
Nos.32&110, Guarantee, pr doz. $38 00
No. 150, Sunshine ..... " 18 00
No. 130, Mendota ..... " 18 00
No. 12, Success..... " 16 00
Blue Bell, Ball Bear'g. " 25 00
No. D 110, Domestic... " 22 50
No. E 300, Empress ... " 25 50
No. 122, Bicycle Ball-bearing..... " 27 00
No. 132, Swan..... " 27 00

Wants and Sales.

For yearly subscribers to THE AMERICAN ARTISAN will be inserted under this head advertisements of six lines WITHOUT CHARGE for employers wishing to secure employes, persons seeking situations, parties desiring to purchase a business, businesses for sale, partners wanted, to exchange, etc. Those who respond to these announcements will please mention that they read the advertisement in THE AMERICAN ARTISAN.

BUSINESS CHANCES.

PATENTS HUBERT E. PECK, 623 F St., N. W., Washington, D. C. Consulting Expert in Patent Causes. U S. and Foreign Patents. Send for leaflet on "Rejected Patent Applications." Honest work but no "Something for Nothing" offers.

For Sale—My stock of hardware and implements. Will invoice about $3,000.00; in excellent farming country. For particulars call on or address E. W. Putnam, Henning, Ill. 3

For Sale—Good hardware and furniture business in good town; good reason for selling. Business, building and residence also. Address Theo. P. Weichel, Plymouth, Neb. 3

For Sale—A new clean $3,500 stock of hardware, with tin shop. Easy competition; will sell by invoice for cash. Address W. H. Buhr & Co., Denver, Iowa. 3

For Sale or Trade—My 320 acre farm in Clark county, South Dakota. Will trade for good stock of hardware in Iowa, Minnesota, South or North Dakota. Address O. Halverson, Harmony, Minn. 3

For Sale—A good, clean hardware stock and tin shop, doing a good business in a live town in western Ohio; good reasons for selling. Address R. H. W., Care of The American Artisan, 69 Dearborn St., Chicago, Ill. 3

For Sale—Stock of hardware, stoves and housefurnishing goods, together with fixtures, good will, etc., in one of the finest retailing sections of Chicago, as owner desires to devote exclusive time to other business. Will sell way under wholesale price for immediate cash. This is an exceptional bargain, and no reasonable cash offer will be refused. Address "Z. Z. Z.," Care of The American Artisan, 69 Dearborn St., Chicago. 3

For Sale—A splendid hardware, buggy and implement business in fine farming section of western Indiana; best reasons for selling; stock about $6,000; doing over $30,000 business. Don't answer unless you mean business. Address "Section," Care of The American Artisan, 69 Dearborn St., Chicago, Ill. 3

Wanted—To trade a ¼ section of land in Polk county, Minnesota, for a small stock of hardware. Address H. Christensen, Ceylon, Minn. 3

Wanted—A small stock of hardware in exchange for a five room brick house and lot, located on west side, Chicago, Ill. Box 433, Leland, Ill. 3

Wanted—To exchange a good 200 acre farm in Benton county, Iowa, for a stock of hardware. Address Box 92, Vinton, Iowa. 3

For Sale—Good clean stock hardware, stoves, tinware, paints, oils, etc., with tin shop. Good town western Indiana of 1,200 population. Splendid farming territory. Invoice about $4,500. Address "Western Indiana," Care of The American Artisan, 69 Dearborn St., Chicago, Ill. 3

For Sale—The stock and good will of one of the best hardware and implement stores in Kansas. Business good. Good reasons for selling. Address "A. B. C.," Care of The American Artisan, 69 Dearborn St., Chicago, Ill. 3

For Sale—For cash in a lively country town of northern Iowa, a clear stock of hardware, with well paying tin shop. Stock and tools about $3,000. Also store building and dwelling. Address "H. S.," Care of The American Artisan, 69 Dearborn St., Chicago, Ill. 3

For Sale—Good, paying hardware store. Owner has so much other business must trust it to others. Locating a big steel plant here. It will be to your interest to address, for particulars, A. W. Courchine, Port Clinton, O. 3

For Sale or Trade—A clean stock of hardware, furniture and shoes, with building 24x82.; only hardware in town; fine farming country. R. R. junction town.; S. W. Minnesota. Address "Trade," Care of The American Artisan, 69 Dearborn St., Chicago, Ill. 2

For Sale—A first-class hardware store and tin shop; located in a nice town, surrounded by a rich farming country. Will give good reasons for selling. A rare chance. Address "Hardware," Care of The American Artisan, 69 Dearborn St., Chicago, Ill. 2

Wanted—I would like to buy an interest in a hardware store in a good, thriving locality, carrying a stock of from $4 000 to $5,000. Address Box 39, Albion, Neb. 2

For Sale—Land in Morton county or Ward county, N. Dak. Will trade part or all for hardware stock in Minnesota, Iowa or Wisconsin. Address Box 315, Alden, Minn. 2

Wanted—A hardware stock from $4,000 to $5,000, for spot cash, in Minnesota, Iowa, North or South Dakota. Must have good, clean stock. Give full description of town and nationality; also size, etc. Send stamped envelope for reply. Address J. L., 314 Bradley Bldg., St. Paul, Minn. 2

TINNERS' TOOLS.

For Sale—1 beading machine, P. & S.; 1 30-in. forming roll, P. & S. make; 1 pipe crimping machine; 1 ½-in. gutter beader. All almost as good as new. Will take $20 for the outfit f. o. b. cars here. Address W. W. Anderson, Atwood, Ill. 2

For Sale—A set of tinners' tools in good serviceable condition, about 50 pieces, for $100. Will send list and description on application. L. Case & Co., Prairie du Chien, Wis. 1

HELP WANTED.

Wanted—First-class tinner; best wages, steady work. Hall Bros. Co., Lincoln, Neb. 3

Wanted—A first-class tinner. Will pay good wages and give steady job to a good man. Write Columbus Hardware Co., Columbus, Wis. 3

Wanted—A good tinner, one who can act as foreman of our tin shop; he must be able to do all kinds of tin work and furnace work; and also able to figure a set of plans for the amount of tin work, etc. We are willing to pay good wages and guarantee steady work to the right kind of a man. Address "P. H. C.," Care of The American Artisan, 69 Dearborn St., Chicago, Ill. 3

Wanted—Tinner who understands pipe work and furnace work. Will pay $60 per month for the right man. Carpenter & Mather, Stanley, Wis. 3

Wanted—Stove salesman. Address or apply Mississippi Valley Stove Works, Fulton, Ill., or Chicago Stove & Range Co., Chicago. 3

Wanted—Salesmen, one for Wisconsin, one for northern Iowa and southern Minnesota. Address "Box F. D.," Care of The American Artisan, 69 Dearborn St. Chicago. 3

Wanted at Once—First-class tinner. Permanent job and good wages to steady man. One who has some knowledge of plumbing preferred. E. B. Schenk Hardware Co., Mt. Vernon, Ind. 3

Wanted—At once, first-class tinner and furnace man to act as foreman. Must be able to figure tin and galvanized iron work from the plans and thoroughly understand furnace work. Steady job the year round. Must have good references. Apply Churchill-Hemenway Co., Galesburg, Ill. 2

Wanted—A retail hardware salesman familiar with building hardware and tools. Address, with reference, experience, salary expected, "H. & H. Co.," Care of The American Artisan, 69 Dearborn St., Chicago, Ill. 2

Wanted—First-class stove pattern filer and fitter. Steady work guaranteed. Apply at once stating experience and wages expected. The James Stewart Mfg. Co., Woodstock, Ont., Canada. 2

Wanted—By Feb. or Mar. 1, a strictly sober man, who has a fair knowledge of both tinning and plumbing and willing to clerk in store when not busy in shop. To the right man we will pay good wages and give steady work permanently if suited. Curtis Hdw. Co., Paonia, Colo. 2

Wanted—A tinner, first-class man; steady work. Josten Hardware Co., La Crosse, Wis. 2

Wanted At Once—First-class tinner and clerk; steady job, good wages; state wages and give reference; don't answer this unless you mean business and want steady job. Don't want a man for a few months. Want him, if satisfactory, years. Thos. Rawlings, Wakefield, Neb. 2

Wanted—Good tinner, capable of doing furnace work, and an all round man in country town. Steady job to right man. Married preferred. Give references. Box 246, Kenyon, Minn. 2

SITUATIONS WANTED.

Position Wanted—A mechanic of experience and capable of putting steel range work in first-class running order, would like to correspond with some company in need of such help; twelve years in charge of range work. Good reasons for making a change. Address "Mechanic," Care of The American Artisan, 69 Dearborn St., Chicago, Ill. 3

Situation Wanted—By a first-class tinner of twenty years' experience; am a practical furnace man; do plumbing; hot water or anything that comes my way; am temperate and married. State wages per week the year round. Address L. B. 289, Dodgeville, Wis. 2

Open for a position as foreman of a range shop or on the road. I have had 22 years' experience in range business; I can make plan blue prints for hotel outfits. Address J. H. R., Care of The American Artisan, 69 Dearborn St., Chicago, Ill. 2

Wanted—The management of a stock of hardware on a per cent basis, 13 years' experience; age 36; best of references as to character and ability. Address W. W. Anderson, Atwood, Ill. 2

SPECIAL NOTICES.

Wanted-An Experienced Stove Man, capable of managing a stove manufacturing plant, capacity about fifty moulders. Would want one with money to invest to take an interest in the business. Good opportunity for the right man. Address "INVEST," care The American Artisan, 69 Dearborn Street, Chicago, Ill. 24

WANTED.

Stove salesmen for Iowa, South Dakota and Southern Minnesota. Only experienced men wanted. Apply by letter.

BERGSTROM BROS. & CO.,
Neenah, Wis.

WANTED.

Advertiser is practical, progressive up-to-date salesman on hot air furnaces, with wide range of experience in estimating and installing work; thoroughly capable, energetic and ambitious, is now open to consider proposition as correspondent, local or road salesman, with some broad-gauged substantial concern handling a strictly reliable up-to-date line of goods. Address GOOD SALESMAN, care AMERICAN ARTISAN, Chicago, Ill.

WANTED

—Salesman for Iowa; also for Indiana and part of Illinois and Ohio.

BONNET-NANCE STOVE CO.,
Chicago Heights, Ill. 24

AGENCY FOR PACIFIC COAST

Salesman now representing a number of first-class manufacturers, is thoroughly acquainted with the trade on the Pacific Coast, wants agency for California and Nevada for any goods handled by the stove and hardware trade. Warehouse room furnished. Address "Box R. W." care of AMERICAN ARTISAN, 69 Dearborn Street, Chicago, Ill. 3

WANTED

—First-class furnace salesman to handle a line of high-grade furnaces in the western states on a commission basis.

The Forrest City Foundry & Mfg. Co.
Winslow, Elm, Sycamore and Main Sts., CLEVELAND, OHIO

SALESMEN WANTED

that call on Hardware Trade in Wisconsin, Illinois and Iowa to sell our line on commission basis.

COLUMBIA MFG. CO. - Antigo, Wis.

FOR SALE.

Business established 30 years—best location in Chicago. Trade continually on the increase. General hardware, house furnishings and crockery, also tin shop, with fine jobbing trade. Must retire on account of health. Inventory $9,000.00 to $10,000.00. Address "**Box 207,**" care THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 4-1

HELP WANTED.

A competent Tin-Plate and Sheet-Metal Salesman for territory between Chicago, Omaha and St. Paul. State experience and salary,

Address **"Box 63,"** care of The American Artisan, 69 Dearborn St., Chicago, Ill. 1-25

SALESMEN WANTED.

Three or four thoroughly first-class (only) furnace and boiler salesmen for territory between Ohio and Colorado. Address, "Box 175," care The American Artisan, 69 Dearborn St., Chicago. 4-23

WANTED

Salesmen to sell King Cream Separators on commission, side line, territory: Missouri, Eastern Iowa, and east of Mississippi River. Address

CHAS. A. VAN PELT, Nebraska City, Neb.

WANTED.

An expert sheet metal worker with long experience on the bench and as foreman desires position in Chicago. Best of references. Address "V" care The American Artisan, 69 Dearborn St., Chicago. 26

WANTED

A good talking proposition for side line, for Illinois, Missouri, Iowa, Kansas and the West, for 1904. References. Answer quick. Address "Hustler", care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill.

C. N. HOOPER, Dubuque, Ia.

VITREOUS ENAMELING

TECHNOLOGIST

Designs, builds and starts new plants. Improves quality and reduces the costs in those already established.

Are You from Missouri?

That's good—because we can SHOW you the best investment in the stove line to-day and one of the best in any industry. We can't fill orders and need the money to enlarge. Our present dividends are big. Investigate this. Address "PAYER," care THE AMERICAN ARTISAN, 69 Dearborn Street, Chicago.

FOR SALE.

My thoroughly equipped stove plant and job foundry, established 30 years, never changed hands; has local demand for entire output. Runs every day in the year; a money maker. I realize, because of conditions, I must sacrifice: 125 miles from Chicago; best of R. R. facilities. **GEO. W. STEWART, 108 Dearborn St., Chicago, Ill.** 2

A RARE CHANCE

Wanted—Every stove dealer in the country to investigate our profit sharing plan—dividend guaranteed 7%—with good prospects of much larger returns. One of the leading malleable steel range builders is offering the retail stove merchant a chance to invest in what is to his interest and will pay a better dividend than government bonds. The men who act quick make money. **Investigate at once.** Address **E. S. H.,** care THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 26

Ebony, Ivory, Coral or Amber Handle, $2.00 per dozen.

Pearl or Stone Handle, $3.00 per dozen.

We will send two dozen prepaid in a handsome plush lined cherry tray to any dealer, on consignment, to be returned at our expense if found unsaleable. We could not do this if they were not the best selling novelty in the hardware trade. It costs you nothing but a 2c stamp to try them. Drop us a line and we do the rest.

DAVISON MFG. CO.
112 Front St. Brooklyn, N. Y.

PATENTED.

FELT WEATHER STRIP

No more sticks and odds and ends and waste.

Felt Weather Strip is put up in Paste Board Boxes. Makes Shelf Goods. Nice profit, *and is better than* Wood and Rubber. Write us—*NOW.*

NORRIS & LORING HARDWARE CO., CEDAR RAPIDS, IA.

If You Want Practical Up-to-Date Ideas

about steam heating, furnace heating and hot water heating, you should get the . . . . . .

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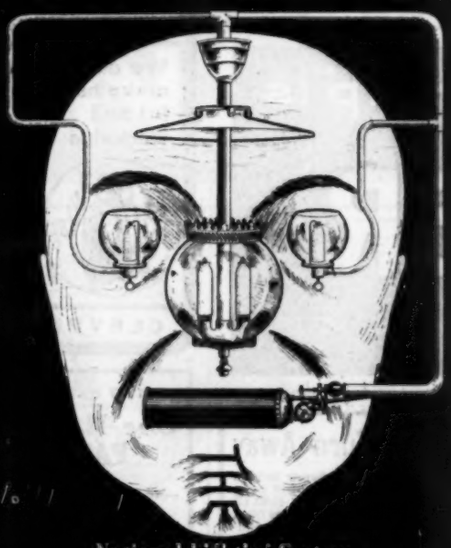

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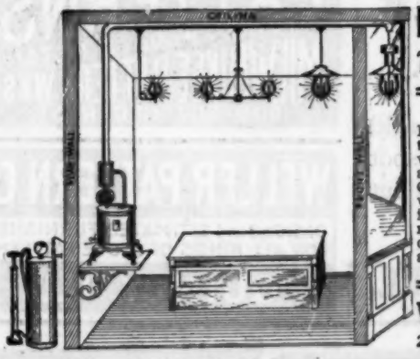

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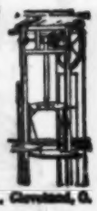

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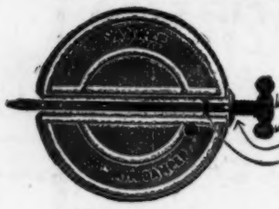
The Best and Easiest Damper to get in or out. Cheapest Damper made. Made also in Oval Shape.



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Steel Rod flattened and turned over handle.
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Spring and Washer.
This pin keeps washer and spring on the rod.
¼ inch cold-rolled steel rod. Can easily be driven through pipe, making small and same size holes on both sides.
Pin at this point with the one further up on the rod, hold the plate firmly, because they are made with large, elongated head. Steel damper plate.

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Smoke Pipe Sizes,	3	4	4½	5	5½	6	7	8
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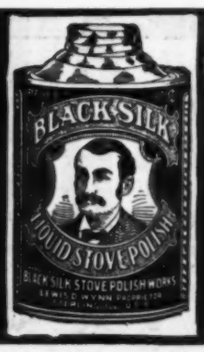
See The Name on the Box.

Not sold to department stores or mail order houses, but only through regular jobbing and retail trade whose orders are solicited.



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Take a little of the Polish on a soft cloth, rub the Metal hard and then wipe it off with a dry cloth.

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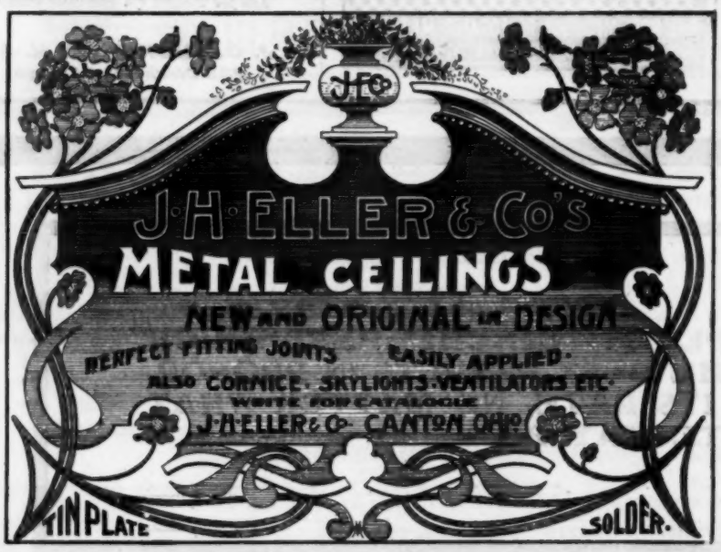

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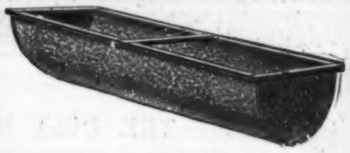

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There is no use in being uncertain when a plate of this character is within your reach.
There are no wasters sold under this brand.
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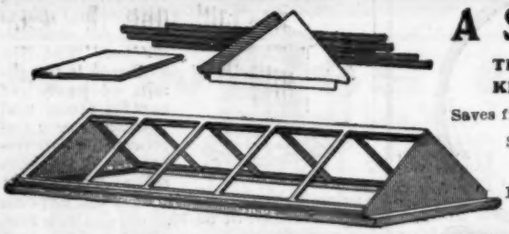

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Saves freight, saves cost of crating.
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Let us send you our Skylight Booklet and quote prices.
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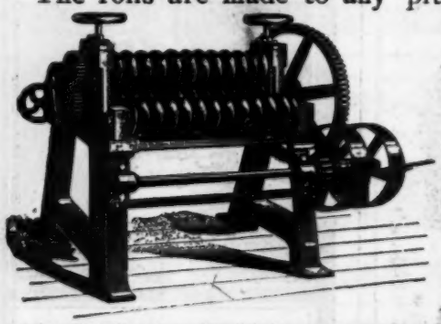
The rolls are made to any pitch corrugation, and are 6 inches in diameter. Made of cast iron, double geared. Will curve to any radius, and will corrugate ridge or combing cap. Are made to operate by power or hand.



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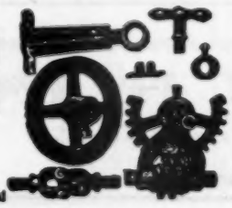

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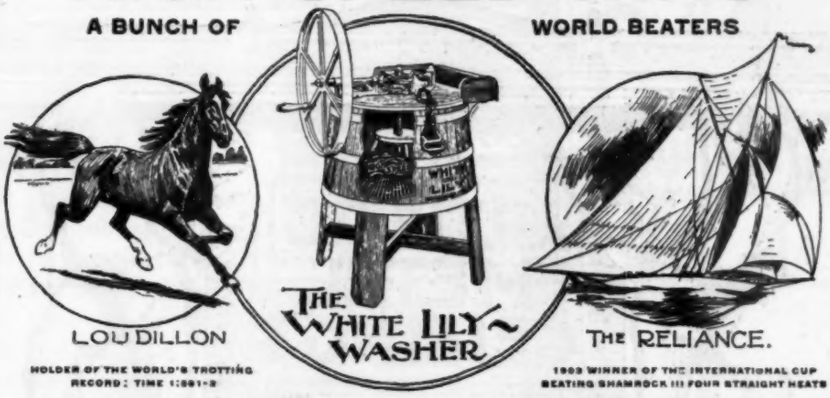
Our own Manufacture.
Follansbee Pure Iron Old Style
Imported genuine iron base plate.
Prompt Shipment. I C and I X always in stock.

J. F. LEWIS, Cisco, Ill., Writes
"I cannot get along without The American Artisan"

HIGH SPEED WINS

WHITE LILY WASHERS

A BUNCH OF WORLD BEATERS



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WASH LILY WHITE

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"Paragon" defined, means a model of excellence. That is why we call our washer "PARAGON". One commendable feature of the PARAGON is a revolving cylinder inside the outer tub. Being made almost wholly of galvanized steel the Paragon is not affected by climatic conditions.

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On FIRST and THIRD TUESDAYS in each Month to **VIRGINIA**

Via NORFOLK & WESTERN RAILWAY

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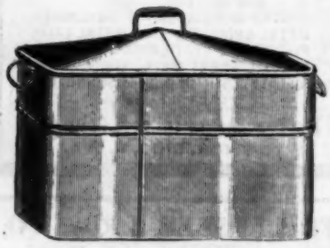

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Wash Boilers

only. I make 45 kinds and sizes. Quality best. Prices lowest. Write for Bottom-Prices.

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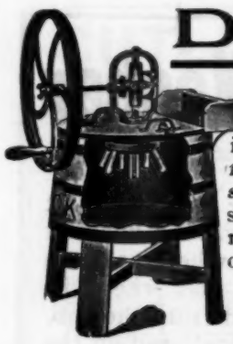
—*Anco Special.*

JOHN H. ROBERTS,

Writes: "I consider **The American Artisan** a great help to any tinner or any man in business."

MUNHALL, PA.



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That the O. K. WASHING MACHINE

is the best made, the lightest running and the most attractive washer on the market? *Are you selling it? If not, why?* Every first-class dealer should sell it, because it is made of the best materials, by the best mechanics that can be obtained, and every one sold will sell another.

Write us for Circulars and Prices.

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Have you ever considered the advantage of the

IMPROVED SCHROEDER ROTARY ROLLER GEARING WASHER?

No steam escapes, prevents disagreeable odors from permeating the house, keeps water hot longer, is light running, simple and durable. The most successful rotary washer on the market.

WORKS SO EASILY A CHILD CAN OPERATE IT.

We can tell you more if you want to know, it is to your interest as well as ours. Why not write us?

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11 Different Styles. 31 Sizes.

Illustration represents our "Uneeda American Round" Washer. For full description write for catalogue showing our complete line. Address

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OVER ONE HUNDRED THOUSAND IN USE

We sell to only one dealer in each town. Write us.

Once Sold They NEVER Come Back

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A Long (K Night In HARDWARE

¶ For years the retail hardware men have been groping in the dark, looking for some efficient way to increase their business—some of them have found it!

Warren's Patent Sectional Glass Front Shelving

is designed and manufactured by a Hardware Man for Hardware Men.

¶ You can keep a line of samples of your entire stock on exhibition at all times.

¶ It preserves each article in the same attractive newness that it comes from the factory, *prevents dust, rust, finger-marks and dirt.*

¶ It enables you to sell goods to a *German*, a *Scandinavian* or *any* other foreigner who, even though he cannot speak English, can *point* to what he wants.

¶ It improves the appearance of your store *100 per cent;* enables your salesmen to spend their time *selling* goods instead of *hunting* for them, and will *pay for itself in one year.*

¶ Send dimensions of your store and let us supply you—FREE—with a color plate made to scale, showing how *your* store will look when equipped with The Best Shelving in the World, for your purpose.

¶ Remember the shelving is made on the unit plan—if you want to experiment—don't wish a complete outfit now—you can buy one—two—three stacks or sections—the rest will follow as your satisfaction increases.

J. D. WARREN MANUFACTURING COMPANY
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Holds 400 Bushels

Cheap, handy and economical. All dealers sell them. Write for prices.

We manufacture Peerless Wire Fence, Lawn Fence Gates, etc.

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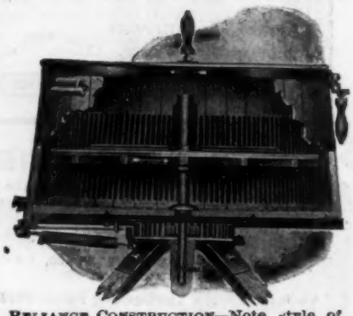

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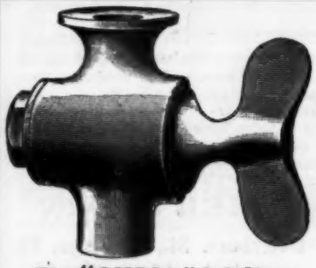

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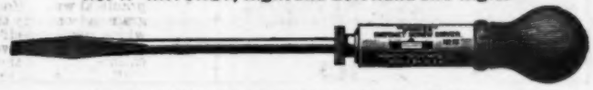

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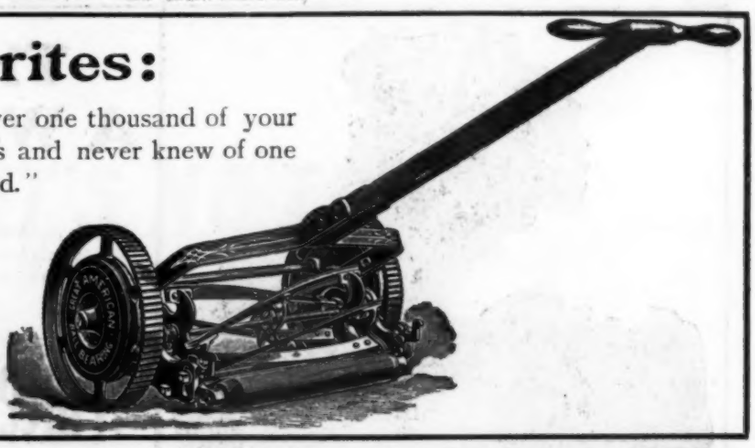

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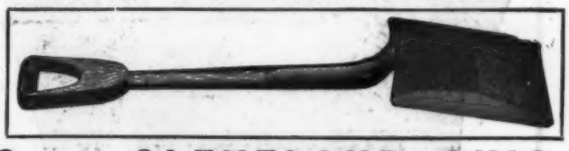

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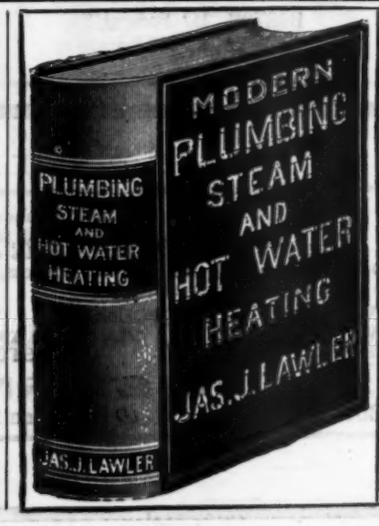

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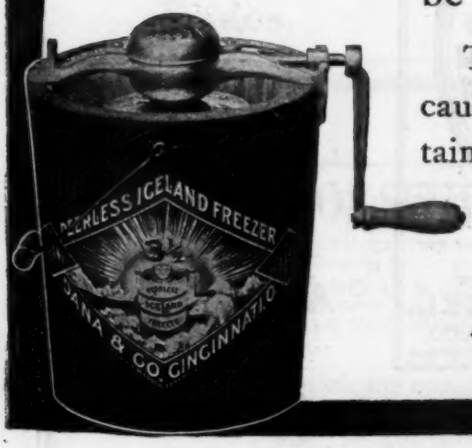

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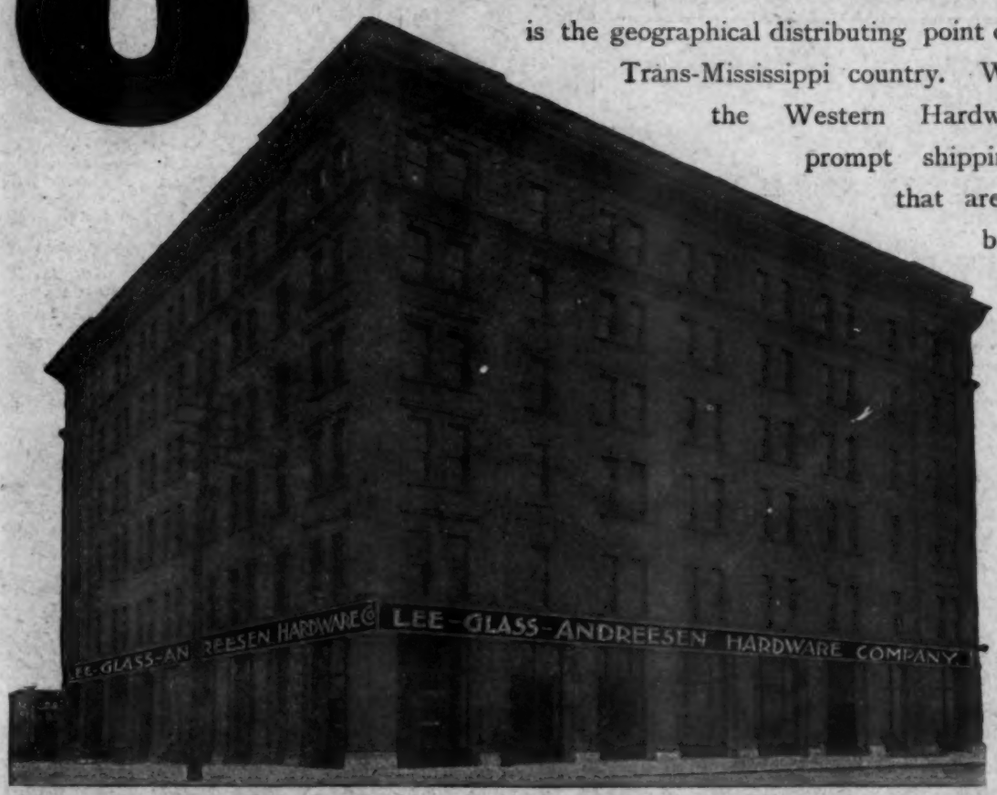

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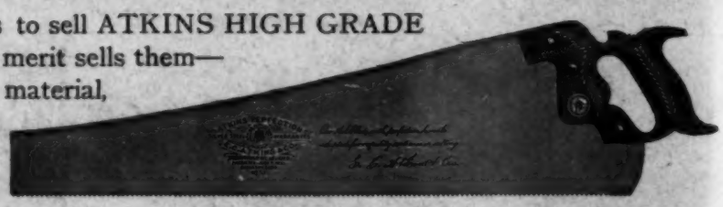

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